GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: February 25, 2004, 01:49:04 ; Search time 23 Seconds
(without alignments)
298.533 Million cell updates/sec

Title: US-09-638-693-36
Perfect score: 133
Sequence: 1 QNEICLTHPITKYIMACMSA.....VIEPIVTTNWQKLEAFWHKH 133

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 389414 seqs, 51625971 residues

Word size : 0

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : Issued_Patents_AA:*
1: /cgn2_6/ptodata/2/iaa/5A_COMB.pep:*
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3: /cgn2_6/ptodata/2/iaa/6A_COMB.pep:*
4: /cgn2_6/ptodata/2/iaa/6B_COMB.pep:*
5: /cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:*
6: /cgn2_6/ptodata/2/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	48	36.1	128	1	US-08-244-116B-17	Sequence 17, Appl
2	41	30.8	829	4	US-09-881-239-5	Sequence 5, Appli
3	41	30.8	1099	4	US-09-881-654-4	Sequence 4, Appli
4	20	15.0	20	4	US-09-790-497A-104	Sequence 104, App
5	20	15.0	22	2	US-08-146-028-107	Sequence 107, App
6	20	15.0	22	3	US-08-723-425A-107	Sequence 107, App
7	20	15.0	22	3	US-09-112-206-107	Sequence 107, App
8	20	15.0	22	4	US-09-576-824A-104	Sequence 104, App
9	19	14.3	19	1	US-08-244-116B-2	Sequence 2, Appli
10	19	14.3	247	1	US-08-324-977-44	Sequence 44, Appl
11	19	14.3	247	2	US-08-384-616-44	Sequence 44, Appl
12	19	14.3	247	2	US-08-904-686A-44	Sequence 44, Appl
13	19	14.3	247	3	US-09-315-850-44	Sequence 44, Appl
14	19	14.3	631	1	US-08-700-356-1	Sequence 1, Appli
15	19	14.3	631	2	US-08-936-865-1	Sequence 1, Appli
16	19	14.3	632	3	US-09-198-723A-23	Sequence 23, Appl
17	19	14.3	632	4	US-09-684-881-23	Sequence 23, Appl
18	19	14.3	646	3	US-09-198-723A-60	Sequence 60, Appl
19	19	14.3	646	3	US-09-198-723A-63	Sequence 63, Appl
20	19	14.3	646	3	US-09-198-723A-66	Sequence 66, Appl
21	19	14.3	646	3	US-09-198-723A-69	Sequence 69, Appl
22	19	14.3	646	3	US-09-198-723A-72	Sequence 72, Appl
23	19	14.3	646	4	US-09-684-881-60	Sequence 60, Appl
24	19	14.3	646	4	US-09-684-881-63	Sequence 63, Appl
25	19	14.3	646	4	US-09-684-881-66	Sequence 66, Appl
26	19	14.3	646	4	US-09-684-881-69	Sequence 69, Appl
27	19	14.3	646	4	US-09-684-881-72	Sequence 72, Appl
28	19	14.3	665	4	US-09-543-376B-1	Sequence 1, Appli
29	19	14.3	665	4	US-09-543-376B-2	Sequence 2, Appli
30	19	14.3	665	4	US-09-543-376B-3	Sequence 3, Appli
31	19	14.3	666	3	US-09-198-723A-11	Sequence 11, Appl
32	19	14.3	666	3	US-09-198-723A-12	Sequence 12, Appl
33	19	14.3	666	3	US-09-198-723A-13	Sequence 13, Appl
34	19	14.3	666	3	US-09-198-723A-14	Sequence 14, Appl
35	19	14.3	666	3	US-09-198-723A-15	Sequence 15, Appl
36	19	14.3	666	3	US-09-198-723A-16	Sequence 16, Appl
37	19	14.3	666	3	US-09-198-723A-17	Sequence 17, Appl
38	19	14.3	666	3	US-09-198-723A-18	Sequence 18, Appl
39	19	14.3	666	4	US-09-684-881-11	Sequence 11, Appl
40	19	14.3	666	4	US-09-684-881-12	Sequence 12, Appl
41	19	14.3	666	4	US-09-684-881-13	Sequence 13, Appl
42	19	14.3	666	4	US-09-684-881-14	Sequence 14, Appl
43	19	14.3	666	4	US-09-684-881-15	Sequence 15, Appl
44	19	14.3	666	4	US-09-684-881-16	Sequence 16, Appl
45	19	14.3	666	4	US-09-684-881-17	Sequence 17, Appl

ALIGNMENTS

RESULT 1
US-08-244-116B-17
; Sequence 17, Application US/08244116B
; Patent No. 5763159
; GENERAL INFORMATION:
; APPLICANT: Simmonds, Peter
; APPLICANT: Chan, Shiu-Wan
; APPLICANT: Yap, Peng L.
; TITLE OF INVENTION: Hepatitis-C Virus Testing
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Bell, Seltzer, Park & Gibson, P.A.
; STREET: 1211 East Morehead Street
; CITY: Charlotte
; STATE: No. 5763159th Carolina
; COUNTRY: United States
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0. Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/244,116B
; FILING DATE: 15-JUL-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/GB92/02143
; FILING DATE: 20-NOV-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 1749-125
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 704-377-1561
; TELEFAX: 704-334-2014
; INFORMATION FOR SEQ ID NO: 17:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 128 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: yes
; FRAGMENT TYPE: internal
; ORIGINAL SOURCE:
; ORGANISM: Hepatitis-C virus
US-08-244-116B-17

Query Match 36.1%; Score 48; DB 1; Length 128;

Best Local Similarity 100.0%; Pred. No. 3.2e-39;
Matches 48; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy          15 MACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGKPA 62
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Db           9 MACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGKPA 56
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RESULT 2
US-09-881-239-5
; Sequence 5, Application US/09881239
; Patent No. 6630298
; GENERAL INFORMATION:
; APPLICANT: CHIEN, David Y.
; APPLICANT: ARCANGEL, Phillip
; APPLICANT: TANDESKE, Laura
; APPLICANT: GEORGE-NASCIEMENTO, Carlos
; APPLICANT: COIT, Doris
; APPLICANT: MEDINA-SELBY, Angelica
; TITLE OF INVENTION: HCV ANTIGEN/ANTIBODY COMBINATION ASSAY
; FILE REFERENCE: 2302-16073 / PP16073.003
; CURRENT APPLICATION NUMBER: US/09/881,239
; CURRENT FILING DATE: 2001-06-14
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5
; LENGTH: 829
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: MEFA 12
US-09-881-239-5

Query Match 30.8%; Score 41; DB 4; Length 829;
Best Local Similarity 100.0%; Pred. No. 1.2e-31;
Matches 41; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy          58 GGKPAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFK 98
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Db         444 GGKPAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFK 484
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RESULT 3
US-09-881-654-4
; Sequence 4, Application US/09881654
; Patent No. 6632601
; GENERAL INFORMATION:
; APPLICANT: CHIEN, David Y.
; APPLICANT: ARCANGEL, Phillip
; APPLICANT: TANDESKE, Laura
; APPLICANT: GEORGE-NASCIEMENTO, Carlos
; APPLICANT: COLT, Doris
; APPLICANT: MEDINA-SELBY, Angelica
; TITLE OF INVENTION: IMMUNOASSAYS FOR ANTI-HCV ANTIBODIES
; FILE REFERENCE: 2302-17039 / PP17039.002
; CURRENT APPLICATION NUMBER: US/09/881,654
; CURRENT FILING DATE: 2001-06-14
; PRIOR APPLICATION NUMBER: 60/212,082
; PRIOR FILING DATE: 2000-06-15
; PRIOR APPLICATION NUMBER: 60/280,811
; PRIOR FILING DATE: 2001-04-02
; PRIOR APPLICATION NUMBER: 60/280,867
; PRIOR FILING DATE: 2001-04-02
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 1099
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: MEFA 7.1
US-09-881-654-4

Query Match 30.8%; Score 41; DB 4; Length 1099;
Best Local Similarity 100.0%; Pred. No. 1.5e-31;
Matches 41; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy          58 GGKPAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFK 98
               |||||||||||||||||||||||||||||||||||||||||||
Db         748 GGKPAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFK 788
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RESULT 4
US-09-790-497A-104
; Sequence 104, Application US/09790497A
; Patent No. 6649735
; GENERAL INFORMATION:
; APPLICANT: De Leys, Robert
; TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES CORRESPONDING
; TITLE OF INVENTION: TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR USE IN
; TITLE OF INVENTION: A PROCESS FOR DETERMINATION OF ANTIBODIES OF
; TITLE OF INVENTION: BIOTINYLATED PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTAN
; TITLE OF INVENTION: EPITOPES, A PROCESS FOR PREPARING THEM AND COMPOSITIONS
; TITLE OF INVENTION: CONTAINING THEM
; FILE REFERENCE: 2752-16
; CURRENT APPLICATION NUMBER: US/09/790,497A
; CURRENT FILING DATE: 2001-02-23
; PRIOR APPLICATION NUMBER: 09/576,824
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 08/723,425
; PRIOR FILING DATE: 1996-09-30
; PRIOR APPLICATION NUMBER: 09/146,028
; PRIOR FILING DATE: 1993-11-22
; PRIOR APPLICATION NUMBER: PCT/EP93/00517
; PRIOR FILING DATE: 1993-03-08
; PRIOR APPLICATION NUMBER: EP 92400598.6
; PRIOR FILING DATE: 1992-03-06
; NUMBER OF SEQ ID NOS: 600
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 104
; LENGTH: 20
; TYPE: PRT
; ORGANISM: Hepatitis C virus
US-09-790-497A-104

Query Match 15.0%; Score 20; DB 4; Length 20;
Best Local Similarity 100.0%; Pred. No. 9.9e-13;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy          57 LGGKPAIVPDKEVLYQQYDE 76
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Db           1 LGGKPAIVPDKEVLYQQYDE 20
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RESULT 5
US-08-146-028-107
; Sequence 107, Application US/08146028
; Patent No. 5891640
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES
; TITLE OF INVENTION: CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR
; TITLE OF INVENTION: IN A PROCESS FOR DETERMINATION OF ANTIBODIES OR BIOTINYLATED
; TITLE OF INVENTION: PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES,
; TITLE OF INVENTION: PROCESS FOR PREPARING THEM AND COMPOSITIONS CONTAINING THEM
; NUMBER OF SEQUENCES: 453
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/146,028
; INFORMATION FOR SEQ ID NO: 107:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 amino acids

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;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
US-08-146-028-107

  Query Match             15.0%;  Score 20;  DB 2;  Length 22;
  Best Local Similarity   100.0%;  Pred. No. 1.1e-12;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         57 LGGKPAIVPDKEVLYQQYDE 76
              ||||||||||||||||||||
Db          2 LGGKPAIVPDKEVLYQQYDE 21


RESULT 6
US-08-723-425A-107
; Sequence 107, Application US/08723425A
; Patent No. 6165730
;  GENERAL INFORMATION:
;    APPLICANT:  DELEYS, ROBERT
;    TITLE OF INVENTION:  PROCESS FOR THE DETERMINATION OF
;    TITLE OF INVENTION:  PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT
;    TITLE OF INVENTION:  EPITOPES AND THEIR USE IN A PROCESS FOR DETERMINATION OF
;    TITLE OF INVENTION:  ANTIBODIES OR BIOTINYLATED PEPTIDES CORRESPONDING ...
;    NUMBER OF SEQUENCES:  453
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  NIXON & VANDERHYE, P.C.
;      STREET:  1100 NORTH GLEBE ROAD, 8TH FLOOR
;      CITY:  Arlington
;      STATE:  VA
;      COUNTRY:  USA
;      ZIP:  22201
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/723,425A
;      FILING DATE:
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  SADOFF, B.J.
;      REGISTRATION NUMBER:  36,663
;      REFERENCE/DOCKET NUMBER:  1487-13
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  703-816-4000
;      TELEFAX:  703-816-4100
;  INFORMATION FOR SEQ ID NO:  107:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  22 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
US-08-723-425A-107

  Query Match             15.0%;  Score 20;  DB 3;  Length 22;
  Best Local Similarity   100.0%;  Pred. No. 1.1e-12;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         57 LGGKPAIVPDKEVLYQQYDE 76
              ||||||||||||||||||||
Db          2 LGGKPAIVPDKEVLYQQYDE 21


RESULT 7
US-09-112-206-107
; Sequence 107, Application US/09112206
; Patent No. 6210903
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  PROCESS FOR THE DETERMINATION OF PEPTIDES
;    TITLE OF INVENTION:  CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR
;    TITLE OF INVENTION:  IN A PROCESS FOR DETERMINATION OF ANTIBODIES OR BIOTINYLATED
;    TITLE OF INVENTION:  PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTANT EPITOPES,
;    TITLE OF INVENTION:  PROCESS FOR PREPARING THEM AND COMPOSITIONS CONTAINING THEM
;    NUMBER OF SEQUENCES:  453
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/112,206
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/146,028
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  107:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  22 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
US-09-112-206-107

  Query Match             15.0%;  Score 20;  DB 3;  Length 22;
  Best Local Similarity   100.0%;  Pred. No. 1.1e-12;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         57 LGGKPAIVPDKEVLYQQYDE 76
              ||||||||||||||||||||
Db          2 LGGKPAIVPDKEVLYQQYDE 21


RESULT 8
US-09-576-824A-104
; Sequence 104, Application US/09576824A
; Patent No. 6667387
; GENERAL INFORMATION:
;  APPLICANT: De Leys, Robert
;  TITLE OF INVENTION: PROCESS FOR THE DETERMINATION OF PEPTIDES CORRESPONDING
;  TITLE OF INVENTION:  TO IMMUNOLOGICALLY IMPORTANT EPITOPES AND THEIR USE IN
;  TITLE OF INVENTION:  A PROCESS FOR DETERMINATION OF ANTIBODIES OF
;  TITLE OF INVENTION:  BIOTINYLATED PEPTIDES CORRESPONDING TO IMMUNOLOGICALLY IMPORTAN
;  TITLE OF INVENTION:  EPITOPES, A PROCESS FOR PREPARING THEM AND COMPOSITIONS
;  TITLE OF INVENTION:  CONTAINING THEM
;  FILE REFERENCE: 2752-11
;  CURRENT APPLICATION NUMBER: US/09/576,824A
;  CURRENT FILING DATE:  2000-05-23
;  PRIOR APPLICATION NUMBER: 08/723,425
;  PRIOR FILING DATE: 1996-09-30
;  PRIOR APPLICATION NUMBER: 09/146,028
;  PRIOR FILING DATE: 1993-11-22
;  PRIOR APPLICATION NUMBER: PCT/EP93/00517
;  PRIOR FILING DATE: 1993-03-08
;  PRIOR APPLICATION NUMBER: EP 92400598.6
;  PRIOR FILING DATE: 1992-03-06
;  NUMBER OF SEQ ID NOS: 600
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 104
;   LENGTH: 22
;   TYPE: PRT
;   ORGANISM: Hepatitis C virus
;   FEATURE:
;   NAME/KEY: VARIANT
;   LOCATION: (1)
;   OTHER INFORMATION: modified site
;   NAME/KEY: VARIANT
;   LOCATION: (22)
;   OTHER INFORMATION: modified site
US-09-576-824A-104
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  Query Match             15.0%;  Score 20;  DB 4;  Length 22;
  Best Local Similarity   100.0%;  Pred. No. 1.1e-12;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         57 LGGKPAIVPDKEVLYQQYDE 76
              ||||||||||||||||||||
Db          2 LGGKPAIVPDKEVLYQQYDE 21


RESULT 9
US-08-244-116B-2
; Sequence 2, Application US/08244116B
; Patent No. 5763159
;  GENERAL INFORMATION:
;    APPLICANT:  Simmonds, Peter
;    APPLICANT:  Chan, Shiu-Wan
;    APPLICANT:  Yap, Peng L.
;    TITLE OF INVENTION:  Hepatitis-C Virus Testing
;    NUMBER OF SEQUENCES:  53
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Bell, Seltzer, Park & Gibson, P.A.
;      STREET:  1211 East Morehead Street
;      CITY:  Charlotte
;      STATE:  No. 5763159th Carolina
;      COUNTRY:  United States
;      ZIP:  28234
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0. Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/244,116B
;      FILING DATE:  15-JUL-1994
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/GB92/02143
;      FILING DATE:  20-NOV-1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Sibley, Kenneth D.
;      REGISTRATION NUMBER:  31,665
;      REFERENCE/DOCKET NUMBER:  1749-125
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  704-377-1561
;      TELEFAX:  704-334-2014
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  19 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    HYPOTHETICAL:  NO
;    FRAGMENT TYPE:  internal
;    ORIGINAL SOURCE:
;      ORGANISM:  Hepatitis-C virus
US-08-244-116B-2

  Query Match             14.3%;  Score 19;  DB 1;  Length 19;
  Best Local Similarity   100.0%;  Pred. No. 8.8e-12;
  Matches   19;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         79 ECSQAAPYIEQAQVIAHQF 97
              |||||||||||||||||||
Db          1 ECSQAAPYIEQAQVIAHQF 19


RESULT 10
US-08-324-977-44
; Sequence 44, Application US/08324977
; Patent No. 5747339
;  GENERAL INFORMATION:
;    APPLICANT:  OKAYAMA, Hiroto
;    APPLICANT:  FUKE, Isao
;    APPLICANT:  MORI, Chisato
;    APPLICANT:  TAKAMIZAWA, Akahisa
;    APPLICANT:  YOSHIDA, Iwao
;    TITLE OF INVENTION:  NON-A, NON-B HEPATITIS VIRUS GENOMIC
;    TITLE OF INVENTION:  cDNA AND ANTIGEN POLYPEPTIDE
;    NUMBER OF SEQUENCES:  50
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Armstrong, Westerman, Hattori, McLeland &
;      ADDRESSEE:  Naughton
;      STREET:  1725 K St. N.W. Suite 1000
;      CITY:  Washington
;      STATE:  D.C.
;      COUNTRY:  U.S.A.
;      ZIP:  20006
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 3.5 in, 1.44Mb
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS, Version 5.0
;      SOFTWARE:  ASCII
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/324,977
;      FILING DATE:  18-OCT-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  JP 2-167466
;      FILING DATE:  25-JUN-1990
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  JP 2-230921
;      FILING DATE:  31-AUG-1990
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  JP 2-305605
;      FILING DATE:  09-NOV-1990
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/099,706
;      FILING DATE:  30-JUL-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/769,996
;      FILING DATE:  02-OCT-1991
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/635,451
;      FILING DATE:  28-DEC-1990
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Stevens-Smith, Theresa M.
;      REGISTRATION NUMBER:  36,281
;      REFERENCE/DOCKET NUMBER:  900703D
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (202) 659-2930
;      TELEFAX:  (202) 887-0357
;      TELEX:  440142
;  INFORMATION FOR SEQ ID NO:  44:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  247 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-324-977-44

  Query Match             14.3%;  Score 19;  DB 1;  Length 247;
  Best Local Similarity   100.0%;  Pred. No. 9.5e-11;
  Matches   19;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          6 LTHPITKYIMACMSADLEV 24
              |||||||||||||||||||
Db         22 LTHPITKYIMACMSADLEV 40


RESULT 11
US-08-384-616-44
; Sequence 44, Application US/08384616
; Patent No. 5847101
;  GENERAL INFORMATION:
;    APPLICANT:  OKAYAMA, Hiroto
;    APPLICANT:  FUKE, Isao
```

```
;    APPLICANT:  MORI, Chisato
;    APPLICANT:  TAKAMIZAWA, Akahisa
;    APPLICANT:  YOSHIDA, Iwao
;    TITLE OF INVENTION:  NON-A, NON-B HEPATITIS VIRUS GENOMIC
;    TITLE OF INVENTION:  cDNA AND ANTIGEN POLYPEPTIDE
;    NUMBER OF SEQUENCES:  50
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Armstrong, Westerman, Hattori, McLeland &
;      ADDRESSEE:  Naughton
;      STREET:  1725 K St. N.W. Suite 1000
;      CITY:  Washington
;      STATE:  D.C.
;      COUNTRY:  U.S.A.
;      ZIP:  20006
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 3.5 in, 1.44Mb
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS, Version 5.0
;      SOFTWARE:  ASCII
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/384,616
;      FILING DATE:
;      CLASSIFICATION:  424
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/769,996
;      FILING DATE:  02-OCT-1991
;      APPLICATION NUMBER:  JP 2-167466
;      FILING DATE:  25-JUN-1990
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  JP 2-230921
;      FILING DATE:  31-AUG-1990
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  JP 2-305605
;      FILING DATE:  09-NOV-1990
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/635,451
;      FILING DATE:  28-DEC-1990
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Stevens-Smith, Theresa M.
;      REGISTRATION NUMBER:  36,281
;      REFERENCE/DOCKET NUMBER:  900703B
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (202) 659-2930
;      TELEFAX:  (202) 887-0357
;      TELEX:  440142
;  INFORMATION FOR SEQ ID NO:  44:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  247 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-384-616-44

  Query Match             14.3%;  Score 19;  DB 2;  Length 247;
  Best Local Similarity   100.0%;  Pred. No. 9.5e-11;
  Matches   19;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          6 LTHPITKYIMACMSADLEV 24
              |||||||||||||||||||
Db         22 LTHPITKYIMACMSADLEV 40


RESULT 12
US-08-904-686A-44
; Sequence 44, Application US/08904686A
; Patent No. 5998130
;  GENERAL INFORMATION:
;    APPLICANT:  OKAYAMA, Hiroto
;    APPLICANT:  FUKE, Isao
;    APPLICANT:  MORI, Chisato
;    APPLICANT:  TAKAMIZAWA, Akahisa
;    APPLICANT:  YOSHIDA, Iwao
;    TITLE OF INVENTION:  NON-A, NON-B HEPATITIS VIRUS GENOMIC
;    TITLE OF INVENTION:  cDNA AND ANTIGEN POLYPEPTIDE
;    NUMBER OF SEQUENCES:  50
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Armstrong, Westerman, Hattori, McLeland &
;      ADDRESSEE:  Naughton
;      STREET:  1725 K St. N.W. Suite 1000
;      CITY:  Washington
;      STATE:  D.C.
;      COUNTRY:  U.S.A.
;      ZIP:  20006
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 3.5 in, 1.44Mb
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS, Version 5.0
;      SOFTWARE:  ASCII
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/904,686A
;      FILING DATE:  01-AUG-1997
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/324,977
;      FILING DATE:  18-OCT-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  JP 2-167466
;      FILING DATE:  25-JUN-1990
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  JP 2-230921
;      FILING DATE:  31-AUG-1990
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  JP 2-305605
;      FILING DATE:  09-NOV-1990
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/099,706
;      FILING DATE:  30-JUL-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/769,996
;      FILING DATE:  02-OCT-1991
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/635,451
;      FILING DATE:  28-DEC-1990
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  McLeland, Le-Nhung
;      REGISTRATION NUMBER:  31,541
;      REFERENCE/DOCKET NUMBER:  900703G
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (202) 659-2930
;      TELEFAX:  (202) 887-0357
;  INFORMATION FOR SEQ ID NO:  44:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  247 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-904-686A-44

  Query Match             14.3%;  Score 19;  DB 2;  Length 247;
  Best Local Similarity   100.0%;  Pred. No. 9.5e-11;
  Matches   19;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          6 LTHPITKYIMACMSADLEV 24
              |||||||||||||||||||
Db         22 LTHPITKYIMACMSADLEV 40


RESULT 13
US-09-315-850-44
; Sequence 44, Application US/09315850
; Patent No. 6217872
;  GENERAL INFORMATION:
;    APPLICANT:  OKAYAMA, Hiroto
;    APPLICANT:  FUKE, Isao
;    APPLICANT:  MORI, Chisato
;    APPLICANT:  TAKAMIZAWA, Akahisa
;    APPLICANT:  YOSHIDA, Iwao
```

```
;    TITLE OF INVENTION:  NON-A, NON-B HEPATITIS VIRUS GENOMIC
;    TITLE OF INVENTION:  cDNA AND ANTIGEN POLYPEPTIDE
;    NUMBER OF SEQUENCES:  50
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Armstrong, Westerman, Hattori, McLeland &
;      ADDRESSEE:  Naughton
;      STREET:  1725 K St. N.W. Suite 1000
;      CITY:  Washington
;      STATE:  D.C.
;      COUNTRY:  U.S.A.
;      ZIP:  20006
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 3.5 in, 1.44Mb
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS, Version 5.0
;      SOFTWARE:  ASCII
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/315,850
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/904,686
;      FILING DATE:  01-AUG-1997
;      APPLICATION NUMBER:  US 08/324,977
;      FILING DATE:  18-OCT-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  JP 2-167466
;      FILING DATE:  25-JUN-1990
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  JP 2-230921
;      FILING DATE:  31-AUG-1990
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  JP 2-305605
;      FILING DATE:  09-NOV-1990
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/099,706
;      FILING DATE:  30-JUL-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/769,996
;      FILING DATE:  02-OCT-1991
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/635,451
;      FILING DATE:  28-DEC-1990
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  McLeland, Le-Nhung
;      REGISTRATION NUMBER:  31,541
;      REFERENCE/DOCKET NUMBER:  900703G
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (202) 659-2930
;      TELEFAX:  (202) 887-0357
;  INFORMATION FOR SEQ ID NO:  44:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  247 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-315-850-44

  Query Match             14.3%;  Score 19;  DB 3;  Length 247;
  Best Local Similarity   100.0%;  Pred. No. 9.5e-11;
  Matches   19;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          6 LTHPITKYIMACMSADLEV 24
              ||||||||||||||||||||
Db         22 LTHPITKYIMACMSADLEV 40


RESULT 14
US-08-700-356-1
; Sequence 1, Application US/08700356
; Patent No. 5739002
;  GENERAL INFORMATION:
;    APPLICANT:  DE FRANCESCO, Raffaele
;    APPLICANT:  FAILLA, Cristina
;    APPLICANT:  TOMEI, Licia
;    TITLE OF INVENTION:  METHOD FOR REPRODUCING IN VITRO THE
;    TITLE OF INVENTION:  PROTEOLYTIC ACTIVITY OF THE NS3 HEPATITIS C VIRUS (HCV)
;    NUMBER OF SEQUENCES:  3
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  BROWDY AND NEIMARK, P.L.L.C.
;      STREET:  419 Seventh Street, N.W., Suite 300
;      CITY:  Washington
;      STATE:  D.C.
;      COUNTRY:  USA
;      ZIP:  20004
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/700,356
;      FILING DATE:  23-AUG-1996
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  BROWDY, Roger L.
;      REGISTRATION NUMBER:  25,618
;      REFERENCE/DOCKET NUMBER:  DE FRANCESCO=1
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  202-628-5197
;      TELEFAX:  202-737-3528
;  INFORMATION FOR SEQ ID NO:  1:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  631 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-700-356-1

  Query Match             14.3%;  Score 19;  DB 1;  Length 631;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-10;
  Matches   19;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          6 LTHPITKYIMACMSADLEV 24
              ||||||||||||||||||||
Db        611 LTHPITKYIMACMSADLEV 629


RESULT 15
US-08-936-865-1
; Sequence 1, Application US/08936865
; Patent No. 5861297
;  GENERAL INFORMATION:
;    APPLICANT:  Sardana, Vinod V
;    APPLICANT:  Blue, Jeffrey T
;    TITLE OF INVENTION:  DETERGENT-FREE HEPATITIS C PROTEASE
;    NUMBER OF SEQUENCES:  3
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  MERCK & CO., INC.
;      STREET:  P.O. Box 2000, 126 E. Lincoln Ave.
;      CITY:  Rahway
;      STATE:  NJ
;      COUNTRY:  US
;      ZIP:  07065-0907
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/936,865
;      FILING DATE:
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Ayler, Sylvia A
;      REGISTRATION NUMBER:  36,436
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;       REFERENCE/DOCKET NUMBER:  19691
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  908-594-4909
;       TELEFAX:  908-594-4720
;   INFORMATION FOR SEQ ID NO:  1:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  631 amino acids
;       TYPE:  amino acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  peptide
;     HYPOTHETICAL:  NO
;     ANTI-SENSE:  NO
;     FRAGMENT TYPE:  internal
;     ORIGINAL SOURCE:
;       ORGANISM:  Hepatitis C. Virus
;       STRAIN:  NS3 Serine Protease Domain
;       INDIVIDUAL ISOLATE:  BK
;     IMMEDIATE SOURCE:
;       LIBRARY:  described by Tomei et al. in 1993
;       CLONE:  cDNA clone pCD (38-9.4)
;     POSITION IN GENOME:
;       MAP POSITION:  1-180
US-08-936-865-1

  Query Match             14.3%;  Score 19;  DB 2;  Length 631;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-10;
  Matches   19;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          6 LTHPITKYIMACMSADLEV 24
              ||||||||||||||||||
Db        611 LTHPITKYIMACMSADLEV 629


Search completed: February 25, 2004, 01:54:33
Job time : 24 secs
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GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: February 25, 2004, 01:53:15 ; Search time 34 Seconds
(without alignments)
825.982 Million cell updates/sec

Title: US-09-638-693-36
Perfect score: 133
Sequence: 1 QNEICLTHPITKYIMACMSA.....VIEPIVTTNWQKLEAFWHKH 133

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 809742 seqs, 211153259 residues

Word size : 0

Total number of hits satisfying chosen parameters: 809742

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : Published_Applications_AA:*
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18: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	133	100.0	133	10	US-09-899-046-36	Sequence 36, Appl
2	133	100.0	133	10	US-09-878-281-36	Sequence 36, Appl
3	98	73.7	133	10	US-09-899-046-38	Sequence 38, Appl
4	98	73.7	133	10	US-09-899-046-40	Sequence 40, Appl
5	98	73.7	133	10	US-09-878-281-38	Sequence 38, Appl
6	98	73.7	133	10	US-09-878-281-40	Sequence 40, Appl
7	98	73.7	209	10	US-09-899-046-223	Sequence 223, App
8	98	73.7	209	10	US-09-878-281-223	Sequence 223, App
9	52	39.1	133	10	US-09-899-046-32	Sequence 32, Appl
10	52	39.1	133	10	US-09-899-046-34	Sequence 34, Appl
11	52	39.1	133	10	US-09-878-281-32	Sequence 32, Appl
12	52	39.1	133	10	US-09-878-281-34	Sequence 34, Appl
13	48	36.1	128	14	US-10-396-964-17	Sequence 17, Appl
14	41	30.8	829	9	US-09-881-239-5	Sequence 5, Appli
15	41	30.8	1099	9	US-09-881-654-4	Sequence 4, Appli
16	20	15.0	20	10	US-09-899-046-97	Sequence 97, Appl
17	20	15.0	20	10	US-09-878-281-97	Sequence 97, Appl
18	19	14.3	19	14	US-10-396-964-2	Sequence 2, Appli
19	19	14.3	95	10	US-09-899-046-30	Sequence 30, Appl
20	19	14.3	95	10	US-09-878-281-30	Sequence 30, Appl
21	19	14.3	481	10	US-09-899-046-270	Sequence 270, App
22	19	14.3	481	10	US-09-878-281-270	Sequence 270, App
23	19	14.3	484	10	US-09-899-046-198	Sequence 198, App
24	19	14.3	484	10	US-09-899-046-200	Sequence 200, App
25	19	14.3	484	10	US-09-878-281-198	Sequence 198, App
26	19	14.3	484	10	US-09-878-281-200	Sequence 200, App
27	19	14.3	1692	10	US-09-919-901-4	Sequence 4, Appli
28	19	14.3	1692	10	US-09-919-901-11	Sequence 11, Appl
29	19	14.3	1692	10	US-09-919-901-18	Sequence 18, Appl
30	19	14.3	1692	14	US-10-191-966-4	Sequence 4, Appli
31	19	14.3	1692	14	US-10-191-966-11	Sequence 11, Appl
32	19	14.3	1692	14	US-10-191-966-18	Sequence 18, Appl
33	19	14.3	2201	13	US-10-085-476-2	Sequence 2, Appli
34	19	14.3	2307	10	US-09-919-901-2	Sequence 2, Appli
35	19	14.3	2307	10	US-09-919-901-9	Sequence 9, Appli
36	19	14.3	2307	10	US-09-919-901-16	Sequence 16, Appl
37	19	14.3	2307	14	US-10-191-966-2	Sequence 2, Appli
38	19	14.3	2307	14	US-10-191-966-9	Sequence 9, Appli
39	19	14.3	2307	14	US-10-191-966-16	Sequence 16, Appl
40	19	14.3	2985	14	US-10-259-275-40	Sequence 40, Appl
41	18	13.5	20	10	US-09-899-046-99	Sequence 99, Appl
42	18	13.5	20	10	US-09-878-281-99	Sequence 99, Appl
43	18	13.5	1985	14	US-10-259-275-42	Sequence 42, Appl
44	18	13.5	2201	13	US-10-029-907-3	Sequence 3, Appli
45	18	13.5	2201	14	US-10-309-561-3	Sequence 3, Appli

ALIGNMENTS

RESULT 1
US-09-899-046-36
; Sequence 36, Application US/09899046
; Publication No. US20030008274A1
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: New sequences of hepatitis C virus
; TITLE OF INVENTION: genotypes for diagnosis, prophylaxis and therapy.
; NUMBER OF SEQUENCES: 270
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/899,046
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/362,455
; FILING DATE:
; INFORMATION FOR SEQ ID NO: 36:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 133 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-899-046-36

Query Match 100.0%; Score 133; DB 10; Length 133;
Best Local Similarity 100.0%; Pred. No. 7.6e-121;
Matches 133; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60

Qy 61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120

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Qy          61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFK 98
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RESULT 9
US-09-899-046-32
; Sequence 32, Application US/09899046
; Publication No. US20030008274A1
;  GENERAL INFORMATION:
;     APPLICANT:
;     TITLE OF INVENTION:  New sequences of hepatitis C virus
;     TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;     NUMBER OF SEQUENCES:  270
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/09/899,046
;       FILING DATE:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/362,455
;       FILING DATE:
;  INFORMATION FOR SEQ ID NO:  32:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  133 amino acids
;       TYPE:  amino acid
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  protein
US-09-899-046-32

  Query Match             39.1%;  Score 52;  DB 10;  Length 133;
  Best Local Similarity   100.0%;  Pred. No. 1.8e-42;
  Matches   52;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Db          11 TKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGKPA 62


RESULT 10
US-09-899-046-34
; Sequence 34, Application US/09899046
; Publication No. US20030008274A1
;  GENERAL INFORMATION:
;     APPLICANT:
;     TITLE OF INVENTION:  New sequences of hepatitis C virus
;     TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;     NUMBER OF SEQUENCES:  270
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/09/899,046
;       FILING DATE:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/362,455
;       FILING DATE:
;  INFORMATION FOR SEQ ID NO:  34:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  133 amino acids
;       TYPE:  amino acid
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  protein
US-09-899-046-34

  Query Match             39.1%;  Score 52;  DB 10;  Length 133;
  Best Local Similarity   100.0%;  Pred. No. 1.8e-42;
  Matches   52;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          11 TKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGKPA 62
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          11 TKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGKPA 62


RESULT 11
US-09-878-281-32
; Sequence 32, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;     APPLICANT:
;     TITLE OF INVENTION:  New sequences of hepatitis C virus
;     TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;     NUMBER OF SEQUENCES:  270
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/09/878,281
;       FILING DATE:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/362,455
;       FILING DATE:
;  INFORMATION FOR SEQ ID NO:  32:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  133 amino acids
;       TYPE:  amino acid
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  protein
US-09-878-281-32

  Query Match             39.1%;  Score 52;  DB 10;  Length 133;
  Best Local Similarity   100.0%;  Pred. No. 1.8e-42;
  Matches   52;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          11 TKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGKPA 62
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          11 TKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGKPA 62


RESULT 12
US-09-878-281-34
; Sequence 34, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;     APPLICANT:
;     TITLE OF INVENTION:  New sequences of hepatitis C virus
;     TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;     NUMBER OF SEQUENCES:  270
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/09/878,281
;       FILING DATE:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/362,455
;       FILING DATE:
;  INFORMATION FOR SEQ ID NO:  34:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  133 amino acids
;       TYPE:  amino acid
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  protein
US-09-878-281-34

  Query Match             39.1%;  Score 52;  DB 10;  Length 133;
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  Best Local Similarity   100.0%;  Pred. No. 1.8e-42;
  Matches   52;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         11 TKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGKPA 62
              ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         11 TKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGKPA 62


RESULT 13
US-10-396-964-17
; Sequence 17, Application US/10396964
; Publication No. US20030198946A1
;  GENERAL INFORMATION:
;    APPLICANT:  Simmonds, Peter
;    APPLICANT:  Chan, Shiu-Wan
;    APPLICANT:  Yap, Peng L.
;    TITLE OF INVENTION:  Hepatitis-C Virus Testing
;    NUMBER OF SEQUENCES:  53
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Bell, Seltzer, Park & Gibson, P.A.
;      STREET:  1211 East Morehead Street
;      CITY:  Charlotte
;      STATE:  No. US20030198946A1th Carolina
;      COUNTRY:  United States
;      ZIP:  28234
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0. Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/10/396,964
;      FILING DATE:  23-MARCH-2003
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/244,116B
;      FILING DATE:  15-JUL-1994
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/GB92/02143
;      FILING DATE:  20-NOV-1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Sibley, Kenneth D.
;      REGISTRATION NUMBER:  31,665
;      REFERENCE/DOCKET NUMBER:  1749-125
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  704-377-1561
;      TELEFAX:  704-334-2014
;  INFORMATION FOR SEQ ID NO:  17:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  128 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    HYPOTHETICAL:  yes
;    FRAGMENT TYPE:  internal
;    ORIGINAL SOURCE:
;      ORGANISM:  Hepatitis-C virus
US-10-396-964-17

  Query Match             36.1%;  Score 48;  DB 14;  Length 128;
  Best Local Similarity   100.0%;  Pred. No. 1.3e-38;
  Matches   48;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         15 MACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGKPA 62
              ||||||||||||||||||||||||||||||||||||||||||||||||
Db          9 MACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGKPA 56


RESULT 14
US-09-881-239-5
; Sequence 5, Application US/09881239
; Publication No. US20020192639A1
; GENERAL INFORMATION:
;  APPLICANT: CHIEN, David Y.
;  APPLICANT:  ARCANGEL, Phillip
;  APPLICANT:  TANDESKE, Laura
;  APPLICANT:  GEORGE-NASCIEMENTO, Carlos
;  APPLICANT:  COIT, Doris
;  APPLICANT:  MEDINA-SELBY, Angelica
;  TITLE OF INVENTION: HCV ANTIGEN/ANTIBODY COMBINATION ASSAY
;  FILE REFERENCE: 2302-16073 / PP16073.003
;  CURRENT APPLICATION NUMBER: US/09/881,239
;  CURRENT FILING DATE:  2001-06-14
;  NUMBER OF SEQ ID NOS: 8
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5
;   LENGTH: 829
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:  MEFA 12
US-09-881-239-5

  Query Match             30.8%;  Score 41;  DB 9;  Length 829;
  Best Local Similarity   100.0%;  Pred. No. 4e-31;
  Matches   41;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         58 GGKPAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFK 98
              |||||||||||||||||||||||||||||||||||||||||
Db        444 GGKPAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFK 484


RESULT 15
US-09-881-654-4
; Sequence 4, Application US/09881654
; Patent No. US20020146685A1
; GENERAL INFORMATION:
;  APPLICANT: CHIEN, David Y.
;  APPLICANT:  ARCANGEL, Phillip
;  APPLICANT:  TANDESKE, Laura
;  APPLICANT:  GEORGE-NASCIEMENTO, Carlos
;  APPLICANT:  COLT, Doris
;  APPLICANT:  MEDINA-SELBY, Angelica
;  TITLE OF INVENTION: IMMUNOASSAYS FOR ANTI-HCV ANTIBODIES
;  FILE REFERENCE: 2302-17039 / PP17039.002
;  CURRENT APPLICATION NUMBER: US/09/881,654
;  CURRENT FILING DATE:  2001-06-14
;  PRIOR APPLICATION NUMBER: 60/212,082
;  PRIOR FILING DATE: 2000-06-15
;  PRIOR APPLICATION NUMBER: 60/280,811
;  PRIOR FILING DATE: 2001-04-02
;  PRIOR APPLICATION NUMBER: 60/280,867
;  PRIOR FILING DATE: 2001-04-02
;  NUMBER OF SEQ ID NOS: 7
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
;   LENGTH: 1099
;   TYPE: PRT
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:  MEFA 7.1
US-09-881-654-4

  Query Match             30.8%;  Score 41;  DB 9;  Length 1099;
  Best Local Similarity   100.0%;  Pred. No. 5.2e-31;
  Matches   41;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         58 GGKPAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFK 98
              |||||||||||||||||||||||||||||||||||||||||
Db        748 GGKPAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFK 788


Search completed: February 25, 2004, 01:58:57
Job time : 35 secs
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GenCore version 5.1.6

OM protein - nucleic search, using frame_plus_p2n model

Run on: February 27, 2004, 21:50:18 ; Search time 64 Seconds
(without alignments)
1153.257 Million cell updates/sec

Title: US-09-638-693-36
Perfect score: 133
Sequence: 1 QNEICLTHPITKYIMACMSA.....VIEPIVTTNWQKLEAFWHKH 133

Scoring table: OLIGO
Xgapop 60.0 , Xgapext 60.0
Ygapop 60.0 , Ygapext 60.0
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 682709 seqs, 277475446 residues

Word size: 1

Total number of hits satisfying chosen parameters: 1360453

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Command line parameters:
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-DB=Issued_Patents_NA -QFMT=fastap -SUFFIX=rni -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=oligo -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR_SCORE=quality -THR_MIN=1 -ALIGN=15 -MODE=LOCAL
-OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000
-USER=US09638693_@CGN_1_1_44_@runat_24022004_135649_6723 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=60 -XGAPEXT=60 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=60 -YGAPEXT=60 -DELOP=6 -DELEXT=7

Database : Issued_Patents_NA:*
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4: /cgn2_6/ptodata/2/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/2/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	48	36.1	367	1	US-08-244-116B-16	Sequence 16, Appl
2	41	30.8	2499	4	US-09-881-239-4	Sequence 4, Appli
3	41	30.8	3297	4	US-09-881-654-3	Sequence 3, Appli
4	19	14.3	741	1	US-08-324-977-43	Sequence 43, Appl
5	19	14.3	741	2	US-08-384-616-43	Sequence 43, Appl
6	19	14.3	741	2	US-08-904-686A-43	Sequence 43, Appl
7	19	14.3	741	3	US-09-315-850-43	Sequence 43, Appl
8	19	14.3	1941	3	US-09-198-723A-116	Sequence 116, App
9	19	14.3	1941	3	US-09-198-723A-117	Sequence 117, App
10	19	14.3	1941	3	US-09-198-723A-118	Sequence 118, App
11	19	14.3	1941	3	US-09-198-723A-119	Sequence 119, App
12	19	14.3	1941	3	US-09-198-723A-120	Sequence 120, App
13	19	14.3	1941	4	US-09-684-881-116	Sequence 116, App
14	19	14.3	1941	4	US-09-684-881-117	Sequence 117, App
15	19	14.3	1941	4	US-09-684-881-118	Sequence 118, App
16	19	14.3	1941	4	US-09-684-881-119	Sequence 119, App
17	19	14.3	1941	4	US-09-684-881-120	Sequence 120, App
18	19	14.3	1998	3	US-09-198-723A-102	Sequence 102, App
19	19	14.3	1998	3	US-09-198-723A-103	Sequence 103, App
20	19	14.3	1998	3	US-09-198-723A-104	Sequence 104, App
21	19	14.3	1998	3	US-09-198-723A-105	Sequence 105, App
22	19	14.3	1998	3	US-09-198-723A-106	Sequence 106, App
23	19	14.3	1998	3	US-09-198-723A-107	Sequence 107, App
24	19	14.3	1998	3	US-09-198-723A-108	Sequence 108, App
25	19	14.3	1998	3	US-09-198-723A-109	Sequence 109, App
26	19	14.3	1998	4	US-09-684-881-102	Sequence 102, App
27	19	14.3	1998	4	US-09-684-881-103	Sequence 103, App
28	19	14.3	1998	4	US-09-684-881-104	Sequence 104, App
29	19	14.3	1998	4	US-09-684-881-105	Sequence 105, App
30	19	14.3	1998	4	US-09-684-881-106	Sequence 106, App
31	19	14.3	1998	4	US-09-684-881-107	Sequence 107, App
32	19	14.3	1998	4	US-09-684-881-108	Sequence 108, App
33	19	14.3	1998	4	US-09-684-881-109	Sequence 109, App
34	19	14.3	2016	3	US-09-198-723A-110	Sequence 110, App
35	19	14.3	2016	3	US-09-198-723A-111	Sequence 111, App
36	19	14.3	2016	4	US-09-684-881-110	Sequence 110, App
37	19	14.3	2016	4	US-09-684-881-111	Sequence 111, App
38	19	14.3	6039	1	US-08-324-977-11	Sequence 11, Appl
39	19	14.3	6039	2	US-08-384-616-11	Sequence 11, Appl
40	19	14.3	6039	2	US-08-904-686A-11	Sequence 11, Appl
41	19	14.3	6039	3	US-09-315-850-11	Sequence 11, Appl
42	19	14.3	7863	1	US-08-324-977-35	Sequence 35, Appl
43	19	14.3	7863	2	US-08-384-616-35	Sequence 35, Appl
44	19	14.3	7863	2	US-08-904-686A-35	Sequence 35, Appl
45	19	14.3	7863	3	US-09-315-850-35	Sequence 35, Appl

ALIGNMENTS

RESULT 1
US-08-244-116B-16
; Sequence 16, Application US/08244116B
; Patent No. 5763159
; GENERAL INFORMATION:
; APPLICANT: Simmonds, Peter
; APPLICANT: Chan, Shiu-Wan
; APPLICANT: Yap, Peng L.
; TITLE OF INVENTION: Hepatitis-C Virus Testing
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Bell, Seltzer, Park & Gibson, P.A.
; STREET: 1211 East Morehead Street
; CITY: Charlotte
; STATE: No. 5763159th Carolina
; COUNTRY: United States
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0. Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/244,116B
; FILING DATE: 15-JUL-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/GB92/02143
; FILING DATE: 20-NOV-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 1749-125
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 704-377-1561
; TELEFAX: 704-334-2014

```
;  INFORMATION FOR SEQ ID NO:  16:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  367 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    ORIGINAL SOURCE:
;      ORGANISM:  Hepatitis-C virus
US-08-244-116B-16

Alignment Scores:
Pred. No.:              1.11e-40        Length:         367
Score:                  48.00           Matches:        83
Percent Similarity:     97.65%          Conservative:   0
Best Local Similarity:  97.65%          Mismatches:     1
Query Match:            36.09%          Indels:         2
DB:                     1               Gaps:           0

US-09-638-693-36 (1-133) x US-08-244-116B-16 (1-367)

Qy         15 MetAlaCysMetSerAlaAspLeuGluValThrThrSerThrTrpValLeuLeuGlyGly 34
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Db         26 AUGGCAUGYAUGUCAGCUGAUCUGGAAGUAACCACCAGCACCUGGGUGUUGCUUGGAGGR 85

Qy         35 ValLeuAlaAlaLeuAlaAlaTyrCysLeuSerValGlyCysValValIleValGlyHis 54
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         86 GUCCUCGCKGCCCUAGCGGCCUACUGCUUGUCAGUCGGCUGCGUUGUGAUUGUGGGYCAU 145

Qy         55 IleGluLeuGlyGlyLysProAlaIle-ValProAspLysGluValLeuTyrGlnGlnTy 74
              ||||||||||||||||||||||    ||||||||||||||||||||||||||||||||
Db        146 AUUGAGCUGGGRGGCAAGCCVGCAMU-CGUUCCAGACAARGARGUGUUGUAUCAACAAUA 204

Qy         74 rAspGluMetGluGluCysSerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAl 94
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        205 CGAUGAGAUGGAGGAGUGCUCGCAAGCYGCCCCAUAUAUCGAACAAGCUCARGURAUAGC 264

Qy         94 aHisGlnPheLys 98
              ||||||||||||||
Db        265 CCACCAGUUCAAG 277

RESULT 2
US-09-881-239-4
; Sequence 4, Application US/09881239
; Patent No. 6630298
; GENERAL INFORMATION:
;  APPLICANT: CHIEN, David Y.
;  APPLICANT:  ARCANGEL, Phillip
;  APPLICANT:  TANDESKE, Laura
;  APPLICANT:  GEORGE-NASCIEMENTO, Carlos
;  APPLICANT:  COIT, Doris
;  APPLICANT:  MEDINA-SELBY, Angelica
;  TITLE OF INVENTION: HCV ANTIGEN/ANTIBODY COMBINATION ASSAY
;  FILE REFERENCE: 2302-16073 / PP16073.003
;  CURRENT APPLICATION NUMBER: US/09/881,239
;  CURRENT FILING DATE:  2001-06-14
;  NUMBER OF SEQ ID NOS: 8
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
;   LENGTH: 2499
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:  MEFA 12
;   NAME/KEY: CDS
;   LOCATION: (1)..(2487)
US-09-881-239-4

Alignment Scores:
Pred. No.:              1.04e-32        Length:         2499
Score:                  41.00           Matches:        41
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            30.83%          Indels:         0
DB:                     4               Gaps:           0

US-09-638-693-36 (1-133) x US-09-881-239-4 (1-2499)

Qy         58 GlyGlyLysProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMet 77
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1330 GGGGGCAAGCCGGCAATCGTTCCAGACAAAGAGGTGTTGTATCAACAATACGATGAGATG 1389

Qy         78 GluGluCysSerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPhe 97
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1390 GAAGAGTGCTCACAAGCTGCCCCATATATCGAACAAGCTCAGGTAATAGCTCACCAGTTC 1449

Qy         98 Lys 98
              |||
Db       1450 AAG 1452

RESULT 3
US-09-881-654-3
; Sequence 3, Application US/09881654
; Patent No. 6632601
; GENERAL INFORMATION:
;  APPLICANT: CHIEN, David Y.
;  APPLICANT:  ARCANGEL, Phillip
;  APPLICANT:  TANDESKE, Laura
;  APPLICANT:  GEORGE-NASCIEMENTO, Carlos
;  APPLICANT:  COLT, Doris
;  APPLICANT:  MEDINA-SELBY, Angelica
;  TITLE OF INVENTION: IMMUNOASSAYS FOR ANTI-HCV ANTIBODIES
;  FILE REFERENCE: 2302-17039 / PP17039.002
;  CURRENT APPLICATION NUMBER: US/09/881,654
;  CURRENT FILING DATE:  2001-06-14
;  PRIOR APPLICATION NUMBER: 60/212,082
;  PRIOR FILING DATE: 2000-06-15
;  PRIOR APPLICATION NUMBER: 60/280,811
;  PRIOR FILING DATE: 2001-04-02
;  PRIOR APPLICATION NUMBER: 60/280,867
;  PRIOR FILING DATE: 2001-04-02
;  NUMBER OF SEQ ID NOS: 7
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3
;   LENGTH: 3297
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:  MEFA 7.1
;   NAME/KEY: CDS
;   LOCATION: (1)..(3297)
US-09-881-654-3

Alignment Scores:
Pred. No.:              1.36e-32        Length:         3297
Score:                  41.00           Matches:        41
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            30.83%          Indels:         0
DB:                     4               Gaps:           0

US-09-638-693-36 (1-133) x US-09-881-654-3 (1-3297)

Qy         58 GlyGlyLysProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMet 77
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2242 GGGGGCAAGCCGGCAATCGTTCCAGACAAAGAGGTGTTGTATCAACAATACGATGAGATG 2301

Qy         78 GluGluCysSerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPhe 97
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2302 GAAGAGTGCTCACAAGCTGCCCCATATATCGAACAAGCTCAGGTAATAGCTCACCAGTTC 2361

Qy         98 Lys 98
              |||
Db       2362 AAG 2364
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RESULT 4
US-08-324-977-43
; Sequence 43, Application US/08324977
; Patent No. 5747339
;  GENERAL INFORMATION:
;    APPLICANT:  OKAYAMA, Hiroto
;    APPLICANT:  FUKE, Isao
;    APPLICANT:  MORI, Chisato
;    APPLICANT:  TAKAMIZAWA, Akahisa
;    APPLICANT:  YOSHIDA, Iwao
;    TITLE OF INVENTION:  NON-A, NON-B HEPATITIS VIRUS GENOMIC
;    TITLE OF INVENTION:  cDNA AND ANTIGEN POLYPEPTIDE
;    NUMBER OF SEQUENCES:  50
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Armstrong, Westerman, Hattori, McLeland &
;      ADDRESSEE:  Naughton
;      STREET:  1725 K St. N.W. Suite 1000
;      CITY:  Washington
;      STATE:  D.C.
;      COUNTRY:  U.S.A.
;      ZIP:  20006
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 3.5 in, 1.44Mb
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS, Version 5.0
;      SOFTWARE:  ASCII
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/324,977
;      FILING DATE:  18-OCT-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  JP 2-167466
;      FILING DATE:  25-JUN-1990
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  JP 2-230921
;      FILING DATE:  31-AUG-1990
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  JP 2-305605
;      FILING DATE:  09-NOV-1990
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/099,706
;      FILING DATE:  30-JUL-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/769,996
;      FILING DATE:  02-OCT-1991
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/635,451
;      FILING DATE:  28-DEC-1990
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Stevens-Smith, Theresa M.
;      REGISTRATION NUMBER:  36,281
;      REFERENCE/DOCKET NUMBER:  900703D
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (202) 659-2930
;      TELEFAX:  (202) 887-0357
;      TELEX:  440142
;  INFORMATION FOR SEQ ID NO:  43:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  741 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA from genomic RNA
;    FEATURE:
;      NAME/KEY:  misc_feature
;      LOCATION:  1..741
;      OTHER INFORMATION:  /note: "sequence = 5178 - 5918 of
;      OTHER INFORMATION:  SEQ ID NO: 1"
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..741
US-08-324-977-43
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Alignment Scores:
Pred. No.:                1.2e-10        Length:          741
Score:                    19.00          Matches:         19
Percent Similarity:       100.00%        Conservative:    0
Best Local Similarity:    100.00%        Mismatches:      0
Query Match:              14.29%         Indels:          0
DB:                       1              Gaps:            0

US-09-638-693-36 (1-133) x US-08-324-977-43 (1-741)

Qy          6 LeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAlaAspLeuGluVal 24
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         64 CTCACCCACCCCATAACCAAATACATCATGGCATGCATGTCGGCTGACCTGGAGGTC 120

RESULT 5
US-08-384-616-43
; Sequence 43, Application US/08384616
; Patent No. 5847101
;  GENERAL INFORMATION:
;    APPLICANT:  OKAYAMA, Hiroto
;    APPLICANT:  FUKE, Isao
;    APPLICANT:  MORI, Chisato
;    APPLICANT:  TAKAMIZAWA, Akahisa
;    APPLICANT:  YOSHIDA, Iwao
;    TITLE OF INVENTION:  NON-A, NON-B HEPATITIS VIRUS GENOMIC
;    TITLE OF INVENTION:  cDNA AND ANTIGEN POLYPEPTIDE
;    NUMBER OF SEQUENCES:  50
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Armstrong, Westerman, Hattori, McLeland &
;      ADDRESSEE:  Naughton
;      STREET:  1725 K St. N.W. Suite 1000
;      CITY:  Washington
;      STATE:  D.C.
;      COUNTRY:  U.S.A.
;      ZIP:  20006
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 3.5 in, 1.44Mb
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS, Version 5.0
;      SOFTWARE:  ASCII
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/384,616
;      FILING DATE:
;      CLASSIFICATION:  424
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/769,996
;      FILING DATE:  02-OCT-1991
;      APPLICATION NUMBER:  JP 2-167466
;      FILING DATE:  25-JUN-1990
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  JP 2-230921
;      FILING DATE:  31-AUG-1990
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  JP 2-305605
;      FILING DATE:  09-NOV-1990
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/635,451
;      FILING DATE:  28-DEC-1990
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Stevens-Smith, Theresa M.
;      REGISTRATION NUMBER:  36,281
;      REFERENCE/DOCKET NUMBER:  900703B
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (202) 659-2930
;      TELEFAX:  (202) 887-0357
;      TELEX:  440142
;  INFORMATION FOR SEQ ID NO:  43:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  741 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA from genomic RNA
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;     FEATURE:
;       NAME/KEY:  misc_feature
;       LOCATION:  1..741
;       OTHER INFORMATION:  /note: "sequence = 5178 - 5918 of
;       OTHER INFORMATION:  SEQ ID NO: 1"
;     FEATURE:
;       NAME/KEY:  CDS
;       LOCATION:  1..741
US-08-384-616-43

Alignment Scores:
Pred. No.:                1.2e-10        Length:          741
Score:                    19.00          Matches:         19
Percent Similarity:       100.00%        Conservative:    0
Best Local Similarity:    100.00%        Mismatches:      0
Query Match:              14.29%         Indels:          0
DB:                       2              Gaps:            0

US-09-638-693-36 (1-133) x US-08-384-616-43 (1-741)

Qy           6 LeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAlaAspLeuGluVal 24
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          64 CTCACCCACCCCATAACCAAATACATCATGGCATGCATGTCGGCTGACCTGGAGGTC 120

RESULT 6
US-08-904-686A-43
; Sequence 43, Application US/08904686A
; Patent No. 5998130
;  GENERAL INFORMATION:
;     APPLICANT:  OKAYAMA, Hiroto
;     APPLICANT:  FUKE, Isao
;     APPLICANT:  MORI, Chisato
;     APPLICANT:  TAKAMIZAWA, Akahisa
;     APPLICANT:  YOSHIDA, Iwao
;     TITLE OF INVENTION:  NON-A, NON-B HEPATITIS VIRUS GENOMIC
;     TITLE OF INVENTION:  cDNA AND ANTIGEN POLYPEPTIDE
;     NUMBER OF SEQUENCES:  50
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  Armstrong, Westerman, Hattori, McLeland &
;       ADDRESSEE:  Naughton
;       STREET:  1725 K St. N.W. Suite 1000
;       CITY:  Washington
;       STATE:  D.C.
;       COUNTRY:  U.S.A.
;       ZIP:  20006
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Diskette, 3.5 in, 1.44Mb
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS, Version 5.0
;       SOFTWARE:  ASCII
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/904,686A
;       FILING DATE:  01-AUG-1997
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 08/324,977
;       FILING DATE:  18-OCT-1994
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  JP 2-167466
;       FILING DATE:  25-JUN-1990
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  JP 2-230921
;       FILING DATE:  31-AUG-1990
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  JP 2-305605
;       FILING DATE:  09-NOV-1990
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 08/099,706
;       FILING DATE:  30-JUL-1993
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 07/769,996
;       FILING DATE:  02-OCT-1991
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 07/635,451
;       FILING DATE:  28-DEC-1990
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  McLeland, Le-Nhung
;       REGISTRATION NUMBER:  31,541
;       REFERENCE/DOCKET NUMBER:  900703G
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (202) 659-2930
;       TELEFAX:  (202) 887-0357
;   INFORMATION FOR SEQ ID NO:  43:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  741 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  cDNA from genomic RNA
;     FEATURE:
;       NAME/KEY:  misc_feature
;       LOCATION:  1..741
;       OTHER INFORMATION:  /note: "sequence = 5178 - 5918 of
;       OTHER INFORMATION:  SEQ ID NO: 1"
;     FEATURE:
;       NAME/KEY:  CDS
;       LOCATION:  1..741
US-08-904-686A-43

Alignment Scores:
Pred. No.:                1.2e-10        Length:          741
Score:                    19.00          Matches:         19
Percent Similarity:       100.00%        Conservative:    0
Best Local Similarity:    100.00%        Mismatches:      0
Query Match:              14.29%         Indels:          0
DB:                       2              Gaps:            0

US-09-638-693-36 (1-133) x US-08-904-686A-43 (1-741)

Qy           6 LeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAlaAspLeuGluVal 24
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          64 CTCACCCACCCCATAACCAAATACATCATGGCATGCATGTCGGCTGACCTGGAGGTC 120

RESULT 7
US-09-315-850-43
; Sequence 43, Application US/09315850
; Patent No. 6217872
;  GENERAL INFORMATION:
;     APPLICANT:  OKAYAMA, Hiroto
;     APPLICANT:  FUKE, Isao
;     APPLICANT:  MORI, Chisato
;     APPLICANT:  TAKAMIZAWA, Akahisa
;     APPLICANT:  YOSHIDA, Iwao
;     TITLE OF INVENTION:  NON-A, NON-B HEPATITIS VIRUS GENOMIC
;     TITLE OF INVENTION:  cDNA AND ANTIGEN POLYPEPTIDE
;     NUMBER OF SEQUENCES:  50
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  Armstrong, Westerman, Hattori, McLeland &
;       ADDRESSEE:  Naughton
;       STREET:  1725 K St. N.W. Suite 1000
;       CITY:  Washington
;       STATE:  D.C.
;       COUNTRY:  U.S.A.
;       ZIP:  20006
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Diskette, 3.5 in, 1.44Mb
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS, Version 5.0
;       SOFTWARE:  ASCII
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/09/315,850
;       FILING DATE:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/904,686
;       FILING DATE:  01-AUG-1997
;       APPLICATION NUMBER:  US 08/324,977
;       FILING DATE:  18-OCT-1994
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;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  JP 2-167466
;       FILING DATE:  25-JUN-1990
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  JP 2-230921
;       FILING DATE:  31-AUG-1990
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  JP 2-305605
;       FILING DATE:  09-NOV-1990
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 08/099,706
;       FILING DATE:  30-JUL-1993
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 07/769,996
;       FILING DATE:  02-OCT-1991
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 07/635,451
;       FILING DATE:  28-DEC-1990
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  McLeland, Le-Nhung
;       REGISTRATION NUMBER:  31,541
;       REFERENCE/DOCKET NUMBER:  900703G
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (202) 659-2930
;       TELEFAX:  (202) 887-0357
;   INFORMATION FOR SEQ ID NO:  43:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  741 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  cDNA from genomic RNA
;     FEATURE:
;       NAME/KEY:  misc_feature
;       LOCATION:  1..741
;       OTHER INFORMATION:  /note: "sequence = 5178 - 5918 of
;       OTHER INFORMATION:  SEQ ID NO: 1"
;     FEATURE:
;       NAME/KEY:  CDS
;       LOCATION:  1..741
US-09-315-850-43

Alignment Scores:
Pred. No.:                1.2e-10          Length:          741
Score:                    19.00            Matches:         19
Percent Similarity:       100.00%          Conservative:    0
Best Local Similarity:    100.00%          Mismatches:      0
Query Match:              14.29%           Indels:          0
DB:                       3                Gaps:            0

US-09-638-693-36 (1-133) x US-09-315-850-43 (1-741)

Qy          6 LeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAlaAspLeuGluVal 24
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         64 CTCACCCACCCCATAACCAAATACATCATGGCATGCATGTCGGCTGACCTGGAGGTC 120

RESULT 8
US-09-198-723A-116
; Sequence 116, Application US/09198723A
; Patent No. 6211338
;  GENERAL INFORMATION:
;    APPLICANT:  Malcolm, Bruce
;    APPLICANT:  Taremi, Shahriar S.
;    APPLICANT:  Weber, Patricia
;    APPLICANT:  Yao, Nanhua
;    TITLE OF INVENTION:  Covalent Complexes of Hepatitis C Virus
;    TITLE OF INVENTION:  NS3 Protease and NS4A Cofactor Peptide
;    NUMBER OF SEQUENCES:  123
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Schering-Plough Corp.
;      STREET:  2000 Galloping Hill Road
;      CITY:  Kenilworth
;      STATE:  New Jersey
;      COUNTRY:  USA
;      ZIP:  07030
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  Power Macintosh
;      OPERATING SYSTEM:  8.0.1
;      SOFTWARE:  Microsoft Word 6.0.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/198,723A
;      FILING DATE:  24 NOV 1998
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  McLaughlin, Jaye P.
;      REGISTRATION NUMBER:  41,211
;      REFERENCE/DOCKET NUMBER:  JB0800
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (908)298-5056
;      TELEFAX:  (908)298-5388
;  INFORMATION FOR SEQ ID NO:  116:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1941 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..1941
US-09-198-723A-116

Alignment Scores:
Pred. No.:                3e-10            Length:          1941
Score:                    19.00            Matches:         19
Percent Similarity:       100.00%          Conservative:    0
Best Local Similarity:    100.00%          Mismatches:      0
Query Match:              14.29%           Indels:          0
DB:                       3                Gaps:            0

US-09-638-693-36 (1-133) x US-09-198-723A-116 (1-1941)

Qy          6 LeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAlaAspLeuGluVal 24
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1876 CTCACCCACCCCATAACCAAATACATCATGGCATGCATGTCGGCCGACCTGGAGGTC 1932

RESULT 9
US-09-198-723A-117
; Sequence 117, Application US/09198723A
; Patent No. 6211338
;  GENERAL INFORMATION:
;    APPLICANT:  Malcolm, Bruce
;    APPLICANT:  Taremi, Shahriar S.
;    APPLICANT:  Weber, Patricia
;    APPLICANT:  Yao, Nanhua
;    TITLE OF INVENTION:  Covalent Complexes of Hepatitis C Virus
;    TITLE OF INVENTION:  NS3 Protease and NS4A Cofactor Peptide
;    NUMBER OF SEQUENCES:  123
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Schering-Plough Corp.
;      STREET:  2000 Galloping Hill Road
;      CITY:  Kenilworth
;      STATE:  New Jersey
;      COUNTRY:  USA
;      ZIP:  07030
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  Power Macintosh
;      OPERATING SYSTEM:  8.0.1
;      SOFTWARE:  Microsoft Word 6.0.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/198,723A
;      FILING DATE:  24 NOV 1998
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
```

```
;       NAME:  McLaughlin, Jaye P.
;       REGISTRATION NUMBER:  41,211
;       REFERENCE/DOCKET NUMBER:  JB0800
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (908)298-5056
;       TELEFAX:  (908)298-5388
;   INFORMATION FOR SEQ ID NO:  117:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  1941 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  cDNA
;     FEATURE:
;       NAME/KEY:  CDS
;       LOCATION:  1..1941
US-09-198-723A-117

Alignment Scores:
Pred. No.:                3e-10          Length:          1941
Score:                    19.00          Matches:         19
Percent Similarity:       100.00%        Conservative:    0
Best Local Similarity:    100.00%        Mismatches:      0
Query Match:              14.29%         Indels:          0
DB:                       3              Gaps:            0

US-09-638-693-36 (1-133) x US-09-198-723A-117 (1-1941)

Qy          6 LeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAlaAspLeuGluVal 24
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1876 CTCACCCACCCCATAACCAAATACATCATGGCATGCATGTCGGCCGACCTGGAGGTC 1932

RESULT 10
US-09-198-723A-118
; Sequence 118, Application US/09198723A
; Patent No. 6211338
;  GENERAL INFORMATION:
;    APPLICANT:  Malcolm, Bruce
;    APPLICANT:  Taremi, Shahriar S.
;    APPLICANT:  Weber, Patricia
;    APPLICANT:  Yao, Nanhua
;    TITLE OF INVENTION:  Covalent Complexes of Hepatitis C Virus
;    TITLE OF INVENTION:  NS3 Protease and NS4A Cofactor Peptide
;    NUMBER OF SEQUENCES:  123
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Schering-Plough Corp.
;      STREET:  2000 Galloping Hill Road
;      CITY:  Kenilworth
;      STATE:  New Jersey
;      COUNTRY:  USA
;      ZIP:  07030
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  Power Macintosh
;      OPERATING SYSTEM:  8.0.1
;      SOFTWARE:  Microsoft Word 6.0.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/198,723A
;      FILING DATE:  24 NOV 1998
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  McLaughlin, Jaye P.
;      REGISTRATION NUMBER:  41,211
;      REFERENCE/DOCKET NUMBER:  JB0800
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (908)298-5056
;      TELEFAX:  (908)298-5388
;  INFORMATION FOR SEQ ID NO:  118:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1941 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..1941
US-09-198-723A-118

Alignment Scores:
Pred. No.:                3e-10          Length:          1941
Score:                    19.00          Matches:         19
Percent Similarity:       100.00%        Conservative:    0
Best Local Similarity:    100.00%        Mismatches:      0
Query Match:              14.29%         Indels:          0
DB:                       3              Gaps:            0

US-09-638-693-36 (1-133) x US-09-198-723A-118 (1-1941)

Qy          6 LeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAlaAspLeuGluVal 24
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1876 CTCACCCACCCCATAACCAAATACATCATGGCATGCATGTCGGCCGACCTGGAGGTC 1932

RESULT 11
US-09-198-723A-119
; Sequence 119, Application US/09198723A
; Patent No. 6211338
;  GENERAL INFORMATION:
;    APPLICANT:  Malcolm, Bruce
;    APPLICANT:  Taremi, Shahriar S.
;    APPLICANT:  Weber, Patricia
;    APPLICANT:  Yao, Nanhua
;    TITLE OF INVENTION:  Covalent Complexes of Hepatitis C Virus
;    TITLE OF INVENTION:  NS3 Protease and NS4A Cofactor Peptide
;    NUMBER OF SEQUENCES:  123
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Schering-Plough Corp.
;      STREET:  2000 Galloping Hill Road
;      CITY:  Kenilworth
;      STATE:  New Jersey
;      COUNTRY:  USA
;      ZIP:  07030
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  Power Macintosh
;      OPERATING SYSTEM:  8.0.1
;      SOFTWARE:  Microsoft Word 6.0.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/198,723A
;      FILING DATE:  24 NOV 1998
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  McLaughlin, Jaye P.
;      REGISTRATION NUMBER:  41,211
;      REFERENCE/DOCKET NUMBER:  JB0800
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (908)298-5056
;      TELEFAX:  (908)298-5388
;  INFORMATION FOR SEQ ID NO:  119:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1941 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..1941
US-09-198-723A-119

Alignment Scores:
Pred. No.:                3e-10          Length:          1941
Score:                    19.00          Matches:         19
Percent Similarity:       100.00%        Conservative:    0
Best Local Similarity:    100.00%        Mismatches:      0
Query Match:              14.29%         Indels:          0
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DB:                     3              Gaps:          0

US-09-638-693-36 (1-133) x US-09-198-723A-119 (1-1941)

Qy          6 LeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAlaAspLeuGluVal 24
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1876 CTCACCCACCCCATAACCAAATACATCATGGCATGCATGTCGGCCGACCTGGAGGTC 1932

RESULT 12
US-09-198-723A-120
; Sequence 120, Application US/09198723A
; Patent No. 6211338
;  GENERAL INFORMATION:
;    APPLICANT:  Malcolm, Bruce
;    APPLICANT:  Taremi, Shahriar S.
;    APPLICANT:  Weber, Patricia
;    APPLICANT:  Yao, Nanhua
;    TITLE OF INVENTION:  Covalent Complexes of Hepatitis C Virus
;    TITLE OF INVENTION:  NS3 Protease and NS4A Cofactor Peptide
;    NUMBER OF SEQUENCES:  123
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Schering-Plough Corp.
;      STREET:  2000 Galloping Hill Road
;      CITY:  Kenilworth
;      STATE:  New Jersey
;      COUNTRY:  USA
;      ZIP:  07030
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  Power Macintosh
;      OPERATING SYSTEM:  8.0.1
;      SOFTWARE:  Microsoft Word 6.0.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/198,723A
;      FILING DATE:  24 NOV 1998
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  McLaughlin, Jaye P.
;      REGISTRATION NUMBER:  41,211
;      REFERENCE/DOCKET NUMBER:  JB0800
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (908)298-5056
;      TELEFAX:  (908)298-5388
;  INFORMATION FOR SEQ ID NO:  120:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1941 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..1941
US-09-198-723A-120

Alignment Scores:
Pred. No.:              3e-10          Length:        1941
Score:                  19.00          Matches:       19
Percent Similarity:     100.00%        Conservative:  0
Best Local Similarity:  100.00%        Mismatches:    0
Query Match:            14.29%         Indels:        0
DB:                     3              Gaps:          0

US-09-638-693-36 (1-133) x US-09-198-723A-120 (1-1941)

Qy          6 LeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAlaAspLeuGluVal 24
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Db       1876 CTCACCCACCCCATAACCAAATACATCATGGCATGCATGTCGGCCGACCTGGAGGTC 1932

RESULT 13
US-09-684-881-116
; Sequence 116, Application US/09684881
; Patent No. 6653127
;  GENERAL INFORMATION:
;       APPLICANT: Malcolm, Bruce
;                  Taremi, Shahriar S.
;                  Weber, Patricia
;                  Yao, Nanhua
;       TITLE OF INVENTION: Covalent Complexes of Hepatitis C Virus
;                           NS3 Protease and NS4A Cofactor Peptide
;       NUMBER OF SEQUENCES: 123
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: Schering-Plough Corp.
;            STREET: 2000 Galloping Hill Road
;            CITY: Kenilworth
;            STATE: New Jersey
;            COUNTRY: USA
;            ZIP: 07030
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Floppy disk
;            COMPUTER: Power Macintosh
;            OPERATING SYSTEM: 8.0.1
;            SOFTWARE: Microsoft Word 6.0.1
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/09/684,881
;            FILING DATE: 06-Oct-2000
;            CLASSIFICATION: <Unknown>
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: US/09/198,723
;            FILING DATE: 24 NOV 1998
;       ATTORNEY/AGENT INFORMATION:
;            NAME: McLaughlin, Jaye P.
;            REGISTRATION NUMBER: 41,211
;            REFERENCE/DOCKET NUMBER: JB0800
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: (908)298-5056
;            TELEFAX: (908)298-5388
;  INFORMATION FOR SEQ ID NO: 116:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 1941 base pairs
;            TYPE: nucleic acid
;            STRANDEDNESS: single
;            TOPOLOGY: linear
;       MOLECULE TYPE: cDNA
;       FEATURE:
;            NAME/KEY:  CDS
;            LOCATION:  1..1941
;       SEQUENCE DESCRIPTION: SEQ ID NO: 116:
US-09-684-881-116

Alignment Scores:
Pred. No.:              3e-10          Length:        1941
Score:                  19.00          Matches:       19
Percent Similarity:     100.00%        Conservative:  0
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US-09-638-693-36 (1-133) x US-09-684-881-116 (1-1941)

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Db       1876 CTCACCCACCCCATAACCAAATACATCATGGCATGCATGTCGGCCGACCTGGAGGTC 1932

RESULT 14
US-09-684-881-117
; Sequence 117, Application US/09684881
; Patent No. 6653127
;  GENERAL INFORMATION:
;       APPLICANT: Malcolm, Bruce
;                  Taremi, Shahriar S.
;                  Weber, Patricia
;                  Yao, Nanhua
;       TITLE OF INVENTION: Covalent Complexes of Hepatitis C Virus
;                           NS3 Protease and NS4A Cofactor Peptide
;       NUMBER OF SEQUENCES: 123
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;         CORRESPONDENCE ADDRESS:
;              ADDRESSEE: Schering-Plough Corp.
;              STREET: 2000 Galloping Hill Road
;              CITY: Kenilworth
;              STATE: New Jersey
;              COUNTRY: USA
;              ZIP: 07030
;         COMPUTER READABLE FORM:
;              MEDIUM TYPE: Floppy disk
;              COMPUTER: Power Macintosh
;              OPERATING SYSTEM: 8.0.1
;              SOFTWARE: Microsoft Word 6.0.1
;         CURRENT APPLICATION DATA:
;              APPLICATION NUMBER: US/09/684,881
;              FILING DATE: 06-Oct-2000
;              CLASSIFICATION: <Unknown>
;         PRIOR APPLICATION DATA:
;              APPLICATION NUMBER: US/09/198,723
;              FILING DATE: 24 NOV 1998
;         ATTORNEY/AGENT INFORMATION:
;              NAME: McLaughlin, Jaye P.
;              REGISTRATION NUMBER: 41,211
;              REFERENCE/DOCKET NUMBER: JB0800
;         TELECOMMUNICATION INFORMATION:
;              TELEPHONE: (908)298-5056
;              TELEFAX: (908)298-5388
;    INFORMATION FOR SEQ ID NO: 117:
;         SEQUENCE CHARACTERISTICS:
;              LENGTH: 1941 base pairs
;              TYPE: nucleic acid
;              STRANDEDNESS: single
;              TOPOLOGY: linear
;         MOLECULE TYPE: cDNA
;         FEATURE:
;              NAME/KEY:  CDS
;              LOCATION:  1..1941
;         SEQUENCE DESCRIPTION: SEQ ID NO: 117:
US-09-684-881-117

Alignment Scores:
Pred. No.:              3e-10          Length:         1941
Score:                  19.00          Matches:        19
Percent Similarity:     100.00%        Conservative:   0
Best Local Similarity:  100.00%        Mismatches:     0
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DB:                     4              Gaps:           0

US-09-638-693-36 (1-133) x US-09-684-881-117 (1-1941)

Qy          6 LeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAlaAspLeuGluVal 24
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Db       1876 CTCACCCACCCCATAACCAAATACATCATGGCATGCATGTCGGCCGACCTGGAGGTC 1932

RESULT 15
US-09-684-881-118
; Sequence 118, Application US/09684881
; Patent No. 6653127
;    GENERAL INFORMATION:
;         APPLICANT: Malcolm, Bruce
;                    Taremi, Shahriar S.
;                    Weber, Patricia
;                    Yao, Nanhua
;         TITLE OF INVENTION: Covalent Complexes of Hepatitis C Virus
;                             NS3 Protease and NS4A Cofactor Peptide
;         NUMBER OF SEQUENCES: 123
;         CORRESPONDENCE ADDRESS:
;              ADDRESSEE: Schering-Plough Corp.
;              STREET: 2000 Galloping Hill Road
;              CITY: Kenilworth
;              STATE: New Jersey
;              COUNTRY: USA
;              ZIP: 07030
;         COMPUTER READABLE FORM:
;              MEDIUM TYPE: Floppy disk
;              COMPUTER: Power Macintosh
;              OPERATING SYSTEM: 8.0.1
;              SOFTWARE: Microsoft Word 6.0.1
;         CURRENT APPLICATION DATA:
;              APPLICATION NUMBER: US/09/684,881
;              FILING DATE: 06-Oct-2000
;              CLASSIFICATION: <Unknown>
;         PRIOR APPLICATION DATA:
;              APPLICATION NUMBER: US/09/198,723
;              FILING DATE: 24 NOV 1998
;         ATTORNEY/AGENT INFORMATION:
;              NAME: McLaughlin, Jaye P.
;              REGISTRATION NUMBER: 41,211
;              REFERENCE/DOCKET NUMBER: JB0800
;         TELECOMMUNICATION INFORMATION:
;              TELEPHONE: (908)298-5056
;              TELEFAX: (908)298-5388
;    INFORMATION FOR SEQ ID NO: 118:
;         SEQUENCE CHARACTERISTICS:
;              LENGTH: 1941 base pairs
;              TYPE: nucleic acid
;              STRANDEDNESS: single
;              TOPOLOGY: linear
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;              NAME/KEY:  CDS
;              LOCATION:  1..1941
;         SEQUENCE DESCRIPTION: SEQ ID NO: 118:
US-09-684-881-118

Alignment Scores:
Pred. No.:              3e-10          Length:         1941
Score:                  19.00          Matches:        19
Percent Similarity:     100.00%        Conservative:   0
Best Local Similarity:  100.00%        Mismatches:     0
Query Match:            14.29%         Indels:         0
DB:                     4              Gaps:           0

US-09-638-693-36 (1-133) x US-09-684-881-118 (1-1941)

Qy          6 LeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAlaAspLeuGluVal 24
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Search completed: February 27, 2004, 22:50:43
Job time : 68 secs
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GenCore version 5.1.6

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Run on: February 27, 2004, 22:44:55 ; Search time 252 Seconds
(without alignments)
1903.941 Million cell updates/sec

Title: US-09-638-693-36
Perfect score: 133
Sequence: 1 QNEICLTHPITKYIMACMSA.....VIEPIVTTNWQKLEAFWHKH 133

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Minimum DB seq length: 0
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-FGAPOP=6 -FGAPEXT=7 -YGAPOP=60 -YGAPEXT=60 -DELOP=6 -DELEXT=7

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	133	100.0	401	10	US-09-899-046-35	Sequence 35, Appl
2	133	100.0	401	10	US-09-878-281-35	Sequence 35, Appl
3	98	73.7	401	10	US-09-899-046-37	Sequence 37, Appl
4	98	73.7	401	10	US-09-899-046-39	Sequence 39, Appl
5	98	73.7	401	10	US-09-878-281-37	Sequence 37, Appl
6	98	73.7	401	10	US-09-878-281-39	Sequence 39, Appl
7	98	73.7	629	10	US-09-899-046-222	Sequence 222, App
8	98	73.7	629	10	US-09-878-281-222	Sequence 222, App
9	52	39.1	401	10	US-09-899-046-31	Sequence 31, Appl
10	52	39.1	401	10	US-09-899-046-33	Sequence 33, Appl
11	52	39.1	401	10	US-09-878-281-31	Sequence 31, Appl
12	52	39.1	401	10	US-09-878-281-33	Sequence 33, Appl
13	48	36.1	367	14	US-10-396-964-16	Sequence 16, Appl
14	41	30.8	2499	9	US-09-881-239-4	Sequence 4, Appli
15	41	30.8	3297	9	US-09-881-654-3	Sequence 3, Appli
16	19	14.3	287	10	US-09-899-046-29	Sequence 29, Appl
17	19	14.3	287	10	US-09-878-281-29	Sequence 29, Appl
18	19	14.3	1443	10	US-09-899-046-269	Sequence 269, App
19	19	14.3	1443	10	US-09-878-281-269	Sequence 269, App
20	19	14.3	1485	10	US-09-899-046-197	Sequence 197, App
21	19	14.3	1485	10	US-09-899-046-199	Sequence 199, App
22	19	14.3	1485	10	US-09-878-281-197	Sequence 197, App
23	19	14.3	1485	10	US-09-878-281-199	Sequence 199, App
24	19	14.3	9275	14	US-10-259-275-39	Sequence 39, Appl
25	19	14.3	9413	10	US-09-827-688-6	Sequence 6, Appli
26	19	14.3	13910	10	US-09-919-901-1	Sequence 1, Appli
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28	19	14.3	13910	10	US-09-919-901-15	Sequence 15, Appl
29	19	14.3	13910	14	US-10-191-966-1	Sequence 1, Appli
30	19	14.3	13910	14	US-10-191-966-8	Sequence 8, Appli
31	19	14.3	13910	14	US-10-191-966-15	Sequence 15, Appl
32	18	13.5	6189	14	US-10-259-275-41	Sequence 41, Appl
33	18	13.5	7989	15	US-10-434-842-16	Sequence 16, Appl
34	18	13.5	7992	13	US-10-005-469-1	Sequence 1, Appli
35	18	13.5	7992	13	US-10-005-469-2	Sequence 2, Appli
36	18	13.5	7992	13	US-10-005-469-4	Sequence 4, Appli
37	18	13.5	7992	13	US-10-005-469-5	Sequence 5, Appli
38	18	13.5	7992	13	US-10-005-469-6	Sequence 6, Appli
39	18	13.5	7992	15	US-10-434-842-1	Sequence 1, Appli
40	18	13.5	7992	15	US-10-434-842-2	Sequence 2, Appli
41	18	13.5	7992	15	US-10-434-842-4	Sequence 4, Appli
42	18	13.5	7992	15	US-10-434-842-5	Sequence 5, Appli
43	18	13.5	7992	15	US-10-434-842-6	Sequence 6, Appli
44	18	13.5	7992	15	US-10-434-842-15	Sequence 15, Appl
45	18	13.5	7992	15	US-10-434-842-17	Sequence 17, Appl

ALIGNMENTS

RESULT 1
US-09-899-046-35
; Sequence 35, Application US/09899046
; Publication No. US20030008274A1
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: New sequences of hepatitis C virus
; TITLE OF INVENTION: genotypes for diagnosis, prophylaxis and therapy.
; NUMBER OF SEQUENCES: 270
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/899,046
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/362,455
; FILING DATE:
; INFORMATION FOR SEQ ID NO: 35:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 401 base pairs
; TYPE: nucleic acid

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;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  cDNA
;     HYPOTHETICAL:  NO
;     ANTI-SENSE:  NO
;     IMMEDIATE SOURCE:
;       CLONE:  BR36-20-164
;     FEATURE:
;       NAME/KEY:  CDS
;       LOCATION:  3..401
US-09-899-046-35

Alignment Scores:
Pred. No.:                4.79e-134       Length:         401
Score:                    133.00          Matches:        133
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              100.00%         Indels:         0
DB:                       10              Gaps:           0

US-09-638-693-36 (1-133) x US-09-899-046-35 (1-401)

Qy          1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20
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Qy         21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40
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Db         63 GATCTGGAAGTAACCACCAGCACCTGGGTTTTGCTTGGAGGGGTCCTCGCGGCCCTAGCG 122

Qy         41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60
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Db        183 CCGGCAATCGTTCCAGACAAAGAGGTGTTGTATCAACAATACGATGAGATGGAAGAGTGC 242

Qy         81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGlyLys 100
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Qy        101 ValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValThr 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        303 GTCCTTGGATTGCTGCAGCGAGCCACCCAACAACAAGCTGTCATTGAGCCCATAGTAACT 362

Qy        121 ThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133
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Db        363 ACCAACTGGCAAAAGCTTGAGGCCTTTTGGCACAAGCAT 401

RESULT 2
US-09-878-281-35
; Sequence 35, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;     APPLICANT:
;     TITLE OF INVENTION:  New sequences of hepatitis C virus
;     TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;     NUMBER OF SEQUENCES:  270
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/09/878,281
;       FILING DATE:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/362,455
;       FILING DATE:
;  INFORMATION FOR SEQ ID NO:  35:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  401 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  cDNA
;     HYPOTHETICAL:  NO
;     ANTI-SENSE:  NO
;     IMMEDIATE SOURCE:
;       CLONE:  BR36-20-164
;     FEATURE:
;       NAME/KEY:  CDS
;       LOCATION:  3..401
US-09-878-281-35

Alignment Scores:
Pred. No.:                4.79e-134       Length:         401
Score:                    133.00          Matches:        133
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              100.00%         Indels:         0
DB:                       10              Gaps:           0

US-09-638-693-36 (1-133) x US-09-878-281-35 (1-401)

Qy          1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          3 CAAAATGAAATCTGCTTGACACACCCCATCACAAAATACATCATGGCATGCATGTCAGCT 62

Qy         21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         63 GATCTGGAAGTAACCACCAGCACCTGGGTTTTGCTTGGAGGGGTCCTCGCGGCCCTAGCG 122

Qy         41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        123 GCCTACTGCTTGTCAGTCGGTTGTGTTGTGATTGTGGGTCATATCGAGCTGGGGGGCAAG 182

Qy         61 ProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMetGluGluCys 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        183 CCGGCAATCGTTCCAGACAAAGAGGTGTTGTATCAACAATACGATGAGATGGAAGAGTGC 242

Qy         81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGlyLys 100
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        243 TCACAAGCTGCCCCATATATCGAACAAGCTCAGGTAATAGCTCACCAGTTCAAGGGAAAA 302

Qy        101 ValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValThr 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        303 GTCCTTGGATTGCTGCAGCGAGCCACCCAACAACAAGCTGTCATTGAGCCCATAGTAACT 362

Qy        121 ThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133
              |||||||||||||||||||||||||||||||||||||||
Db        363 ACCAACTGGCAAAAGCTTGAGGCCTTTTGGCACAAGCAT 401

RESULT 3
US-09-899-046-37
; Sequence 37, Application US/09899046
; Publication No. US20030008274A1
;  GENERAL INFORMATION:
;     APPLICANT:
;     TITLE OF INVENTION:  New sequences of hepatitis C virus
;     TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;     NUMBER OF SEQUENCES:  270
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/09/899,046
;       FILING DATE:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/362,455
;       FILING DATE:
;  INFORMATION FOR SEQ ID NO:  37:
;     SEQUENCE CHARACTERISTICS:
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;       LENGTH:  401 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  cDNA
;     HYPOTHETICAL:  NO
;     ANTI-SENSE:  NO
;     IMMEDIATE SOURCE:
;       CLONE:  BR36-20-166
;     FEATURE:
;       NAME/KEY:  CDS
;       LOCATION:  3..401
US-09-899-046-37

Alignment Scores:
Pred. No.:                2.43e-96        Length:          401
Score:                    98.00           Matches:         132
Percent Similarity:       98.51%          Conservative:    0
Best Local Similarity:    98.51%          Mismatches:      1
Query Match:              73.68%          Indels:          2
DB:                       10              Gaps:            0

US-09-638-693-36 (1-133) x US-09-899-046-37 (1-401)

Qy          1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          3 CAAAATGAAATCTGCTTGACACACCCCATCACAAAATACATCATGGCATGCATGTCAGCT 62

Qy         21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         63 GATCTGGAAGTAACCACCAGCACCTGGGTTTTGCTTGGAGGGGTCCTCGCGGCCCTAGCG 122

Qy         41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        123 GCCTACTGCTTGTCAGTCGGTTGTGTTGTGATTGTGGGTCATATCGAGCTGGGGGGCAAG 182

Qy         61 ProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMetGluGluCys 80
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        183 CCGGCAATCGTTCCAGACAAAGAGGTGTTGTATCAACAATACGATGAGATGGAAGAGTGC 242

Qy         81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGly-Ly 100
              |||||||||||||||||||||||||||||||||||||||||||||||||||  ||| ||
Db        243 TCACAAGCTGCCCCATATATCGAACAAGCTCAGGTGATAGCTCACCAGTTCAA-GGAAAA 301

Qy        100 sValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValTh 120
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        302 AGTCCTTGGATTGCTGCAGCGAGCCACCCAACAACAAGCTGTCATTGAGCCCATAGTAAC 361

Qy        120 rThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133
              |||||||||||||||||||||||||||||||||||||||
Db        362 TACCAACTGGCAAAAGCTTGAGGCCTTTTGGCACAAGCAT 401

RESULT 4
US-09-899-046-39
; Sequence 39, Application US/09899046
; Publication No. US20030008274A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/899,046
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  39:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  401 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    IMMEDIATE SOURCE:
;      CLONE:  BR36-20-165
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  3..401
US-09-899-046-39

Alignment Scores:
Pred. No.:                2.43e-96        Length:          401
Score:                    98.00           Matches:         132
Percent Similarity:       98.51%          Conservative:    0
Best Local Similarity:    98.51%          Mismatches:      1
Query Match:              73.68%          Indels:          2
DB:                       10              Gaps:            0

US-09-638-693-36 (1-133) x US-09-899-046-39 (1-401)

Qy          1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          3 CAAAATGAAATCTGCTTGACACACCCCATCACAAAATACATCATGGCATGCATGTCAGCT 62

Qy         21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         63 GATCTGGAAGTAACCACCAGCACCTGGGTTTTGCTTGGAGGGGTCCTCGCGGCCCTAGCG 122

Qy         41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        123 GCCTACTGCTTGTCAGTCGGTTGTGTTGTGATTGTGGGTCATATCGAGCTGGGGGGCAAG 182

Qy         61 ProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMetGluGluCys 80
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        183 CCGGCAATCGTTCCAGACAAAGAGGTGTTGTATCAACAATACGATGAGATGGAAGAGTGC 242

Qy         81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGly-Ly 100
              |||||||||||||||||||||||||||||||||||||||||||||||||||  ||| ||
Db        243 TCACAAGCTGCCCCATATATCGAACAAGCTCAGGTAATAGCTCACCAGTTCAA-GGAAAA 301

Qy        100 sValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValTh 120
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        302 AGTCCTTGGATTGCTGCAGCGAGCCACCCAACAACAAGCTGTCATTGAGCCCATAGTAAC 361

Qy        120 rThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133
              |||||||||||||||||||||||||||||||||||||||
Db        362 TACCAACTGGCAAAAGCTTGAGGCCTTTTGGCACAAGCAT 401

RESULT 5
US-09-878-281-37
; Sequence 37, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/878,281
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
```

```
;  INFORMATION FOR SEQ ID NO:  37:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  401 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    IMMEDIATE SOURCE:
;      CLONE:  BR36-20-166
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  3..401
US-09-878-281-37

Alignment Scores:
Pred. No.:                2.43e-96      Length:          401
Score:                    98.00         Matches:         132
Percent Similarity:       98.51%        Conservative:    0
Best Local Similarity:    98.51%        Mismatches:      1
Query Match:              73.68%        Indels:          2
DB:                       10            Gaps:            0

US-09-638-693-36 (1-133) x US-09-878-281-37 (1-401)

Qy          1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          3 CAAAATGAAATCTGCTTGACACACCCCATCACAAAATACATCATGGCATGCATGTCAGCT 62

Qy         21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         63 GATCTGGAAGTAACCACCAGCACCTGGGTTTTGCTTGGAGGGGTCCTCGCGGCCCTAGCG 122

Qy         41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        123 GCCTACTGCTTGTCAGTCGGTTGTGTTGTGATTGTGGGTCATATCGAGCTGGGGGGCAAG 182

Qy         61 ProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMetGluGluCys 80
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        183 CCGGCAATCGTTCCAGACAAAGAGGTGTTGTATCAACAATACGATGAGATGGAAGAGTGC 242

Qy         81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGly-Ly 100
              |||||||||||||||||||||||||||||||||||||||||||||||||||||   ||| ||
Db        243 TCACAAGCTGCCCCATATATCGAACAAGCTCAGGTGATAGCTCACCAGTTCAA-GGAAAA 301

Qy        100 sValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValTh 120
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        302 AGTCCTTGGATTGCTGCAGCGAGCCACCCAACAACAAGCTGTCATTGAGCCCATAGTAAC 361

Qy        120 rThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133
              |||||||||||||||||||||||||||||||||||||||
Db        362 TACCAACTGGCAAAAGCTTGAGGCCTTTTGGCACAAGCAT 401

RESULT 6
US-09-878-281-39
; Sequence 39, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/878,281
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  39:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  401 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    IMMEDIATE SOURCE:
;      CLONE:  BR36-20-165
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  3..401
US-09-878-281-39

Alignment Scores:
Pred. No.:                2.43e-96      Length:          401
Score:                    98.00         Matches:         132
Percent Similarity:       98.51%        Conservative:    0
Best Local Similarity:    98.51%        Mismatches:      1
Query Match:              73.68%        Indels:          2
DB:                       10            Gaps:            0

US-09-638-693-36 (1-133) x US-09-878-281-39 (1-401)

Qy          1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          3 CAAAATGAAATCTGCTTGACACACCCCATCACAAAATACATCATGGCATGCATGTCAGCT 62

Qy         21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         63 GATCTGGAAGTAACCACCAGCACCTGGGTTTTGCTTGGAGGGGTCCTCGCGGCCCTAGCG 122

Qy         41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        123 GCCTACTGCTTGTCAGTCGGTTGTGTTGTGATTGTGGGTCATATCGAGCTGGGGGGCAAG 182

Qy         61 ProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMetGluGluCys 80
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        183 CCGGCAATCGTTCCAGACAAAGAGGTGTTGTATCAACAATACGATGAGATGGAAGAGTGC 242

Qy         81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGly-Ly 100
              |||||||||||||||||||||||||||||||||||||||||||||||||||||   ||| ||
Db        243 TCACAAGCTGCCCCATATATCGAACAAGCTCAGGTAATAGCTCACCAGTTCAA-GGAAAA 301

Qy        100 sValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValTh 120
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        302 AGTCCTTGGATTGCTGCAGCGAGCCACCCAACAACAAGCTGTCATTGAGCCCATAGTAAC 361

Qy        120 rThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133
              |||||||||||||||||||||||||||||||||||||||
Db        362 TACCAACTGGCAAAAGCTTGAGGCCTTTTGGCACAAGCAT 401

RESULT 7
US-09-899-046-222
; Sequence 222, Application US/09899046
; Publication No. US20030008274A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/899,046
;      FILING DATE:
;    PRIOR APPLICATION DATA:
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```
;       APPLICATION NUMBER:  08/362,455
;       FILING DATE:
;   INFORMATION FOR SEQ ID NO:  222:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  629 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  cDNA
;     HYPOTHETICAL:  NO
;     ANTI-SENSE:  NO
;     FEATURE:
;       NAME/KEY:  CDS
;       LOCATION:  3..629
;     FEATURE:
;       NAME/KEY:  mat_peptide
;       LOCATION:  3..629
US-09-899-046-222

Alignment Scores:
Pred. No.:                3.68e-96        Length:         629
Score:                    98.00           Matches:        132
Percent Similarity:       98.51%          Conservative:   0
Best Local Similarity:    98.51%          Mismatches:     1
Query Match:              73.68%          Indels:         2
DB:                       10              Gaps:           0

US-09-638-693-36 (1-133) x US-09-899-046-222 (1-629)

Qy          1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        231 CAAAATGAAATCTGCTTGACACACCCCATCACAAAATACATCATGGCATGCATGTCAGCT 290

Qy         21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        291 GATCTGGAAGTAACCACCAGCACCTGGGTTTTGCTTGGAGGGGTCCTCGCGGCCCTAGCG 350

Qy         41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        351 GCCTACTGCTTGTCAGTCGGTTGTGTTGTGATTGTGGGTCATATCGAGCTGGGGGGCAAG 410

Qy         61 ProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMetGluGluCys 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        411 CCGGCAATCGTTCCAGACAAAGAGGTGTTGTATCAACAATACGATGAGATGGAAGAGTGC 470

Qy         81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGly-Ly 100
              ||||||||||||||||||||||||||||||||||||||||||||||||||||   ||| ||
Db        471 TCACAAGCTGCCCCATATATCGAACAAGCTCAGGTAATAGCTCACCAGTTCAA-GGAAAA 529

Qy        100 sValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValTh 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        530 AGTCCTTGGATTGCTGCAGCGAGCCACCCAACAACAAGCTGTCATTGAGCCCATAGTAAC 589

Qy        120 rThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133
              |||||||||||||||||||||||||||||||||||||||
Db        590 TACCAACTGGCAAAAGCTTGAGGCCTTTTGGCACAAGCAT 629

RESULT 8
US-09-878-281-222
; Sequence 222, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/878,281
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;   INFORMATION FOR SEQ ID NO:  222:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  629 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  cDNA
;     HYPOTHETICAL:  NO
;     ANTI-SENSE:  NO
;     FEATURE:
;       NAME/KEY:  CDS
;       LOCATION:  3..629
;     FEATURE:
;       NAME/KEY:  mat_peptide
;       LOCATION:  3..629
US-09-878-281-222

Alignment Scores:
Pred. No.:                3.68e-96        Length:         629
Score:                    98.00           Matches:        132
Percent Similarity:       98.51%          Conservative:   0
Best Local Similarity:    98.51%          Mismatches:     1
Query Match:              73.68%          Indels:         2
DB:                       10              Gaps:           0

US-09-638-693-36 (1-133) x US-09-878-281-222 (1-629)

Qy          1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        231 CAAAATGAAATCTGCTTGACACACCCCATCACAAAATACATCATGGCATGCATGTCAGCT 290

Qy         21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        291 GATCTGGAAGTAACCACCAGCACCTGGGTTTTGCTTGGAGGGGTCCTCGCGGCCCTAGCG 350

Qy         41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        351 GCCTACTGCTTGTCAGTCGGTTGTGTTGTGATTGTGGGTCATATCGAGCTGGGGGGCAAG 410

Qy         61 ProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMetGluGluCys 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        411 CCGGCAATCGTTCCAGACAAAGAGGTGTTGTATCAACAATACGATGAGATGGAAGAGTGC 470

Qy         81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGly-Ly 100
              ||||||||||||||||||||||||||||||||||||||||||||||||||||   ||| ||
Db        471 TCACAAGCTGCCCCATATATCGAACAAGCTCAGGTAATAGCTCACCAGTTCAA-GGAAAA 529

Qy        100 sValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValTh 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        530 AGTCCTTGGATTGCTGCAGCGAGCCACCCAACAACAAGCTGTCATTGAGCCCATAGTAAC 589

Qy        120 rThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133
              |||||||||||||||||||||||||||||||||||||||
Db        590 TACCAACTGGCAAAAGCTTGAGGCCTTTTGGCACAAGCAT 629

RESULT 9
US-09-899-046-31
; Sequence 31, Application US/09899046
; Publication No. US20030008274A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
```

```
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/09/899,046
;       FILING DATE:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/362,455
;       FILING DATE:
;   INFORMATION FOR SEQ ID NO:  31:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  401 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  cDNA
;     HYPOTHETICAL:  NO
;     ANTI-SENSE:  NO
;     IMMEDIATE SOURCE:
;       CLONE:  HD10-1-25
;     FEATURE:
;       NAME/KEY:  CDS
;       LOCATION:  3..401
US-09-899-046-31

Alignment Scores:
Pred. No.:                8.72e-47        Length:         401
Score:                    52.00           Matches:        87
Percent Similarity:       97.75%          Conservative:   0
Best Local Similarity:    97.75%          Mismatches:     1
Query Match:              39.10%          Indels:         2
DB:                       10              Gaps:           0

US-09-638-693-36 (1-133) x US-09-899-046-31 (1-401)

Qy          11 ThrLysTyrIleMetAlaCysMetSerAlaAspLeuGluValThrThrSerThrTrpVal 30
               |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          33 ACAAAATACATTATGGCATGCATGTCAGCTGATCTGGAAGTAACCACCAGCACCTGGGTG 92

Qy          31 LeuLeuGlyGlyValLeuAlaAlaLeuAlaAlaTyrCysLeuSerValGlyCysValVal 50
               |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          93 TTGCTTGGAGGGGTCCTCGCGGCCCTAGCGGCCTACTGCTTGTCAGTCGGCTGCGTTGTA 152

Qy          51 IleValGlyHisIleGluLeuGlyGlyLysProAlaIle-ValProAspLysGluValLe 70
               ||||||||||||||||||||||||||||||||||||||    |||||||||||||||||||
Db         153 ATCGTGGGTCATATCGAGCTGGGGGGCAAGCCGGCACT-CGTTCCAGACAAGGAGGTGTT 211

Qy          70 uTyrGlnGlnTyrAspGluMetGluGluCysSerGlnAlaAlaProTyrIleGluGlnAl 90
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         212 GTATCAACAGTACGATGAGATGGAGGAGTGCTCGCAAGCCGCCCCATACATCGAACAAGC 271

Qy          90 aGlnValIleAlaHisGlnPheLys 98
               |||||||||||||||||||||||||
Db         272 TCAGGTAATAGCCCACCAGTTCAAG 296

RESULT 10
US-09-899-046-33
; Sequence 33, Application US/09899046
; Publication No. US20030008274A1
;  GENERAL INFORMATION:
;     APPLICANT:
;     TITLE OF INVENTION:  New sequences of hepatitis C virus
;     TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;     NUMBER OF SEQUENCES:  270
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/09/899,046
;       FILING DATE:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/362,455
;       FILING DATE:
;   INFORMATION FOR SEQ ID NO:  33:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  401 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  cDNA
;     HYPOTHETICAL:  NO
;     ANTI-SENSE:  NO
;     IMMEDIATE SOURCE:
;       CLONE:  HD10-1-3
;     FEATURE:
;       NAME/KEY:  CDS
;       LOCATION:  3..401
US-09-899-046-33

Alignment Scores:
Pred. No.:                8.72e-47        Length:         401
Score:                    52.00           Matches:        87
Percent Similarity:       97.75%          Conservative:   0
Best Local Similarity:    97.75%          Mismatches:     1
Query Match:              39.10%          Indels:         2
DB:                       10              Gaps:           0

US-09-638-693-36 (1-133) x US-09-899-046-33 (1-401)

Qy          11 ThrLysTyrIleMetAlaCysMetSerAlaAspLeuGluValThrThrSerThrTrpVal 30
               |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          33 ACAAAATACATTATGGCATGCATGTCAGCTGATCTGGAAGTAACCACCAGCACCTGGGTG 92

Qy          31 LeuLeuGlyGlyValLeuAlaAlaLeuAlaAlaTyrCysLeuSerValGlyCysValVal 50
               |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          93 TTGCTTGGAGGGGTCCTCGCGGCCCTAGCGGCCTACTGCTTGTCAGTCGGCTGCGTTGTA 152

Qy          51 IleValGlyHisIleGluLeuGlyGlyLysProAlaIle-ValProAspLysGluValLe 70
               ||||||||||||||||||||||||||||||||||||||    |||||||||||||||||||
Db         153 ATCGTGGGTCATATCGAGCTGGGGGGCAAGCCGGCACT-CGTTCCAGACAAGGAGGTGTT 211

Qy          70 uTyrGlnGlnTyrAspGluMetGluGluCysSerGlnAlaAlaProTyrIleGluGlnAl 90
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         212 GTATCAACAGTACGATGAGATGGAGGAGTGCTCGCAAGCCGCCCCATACATCGAACAAGC 271

Qy          90 aGlnValIleAlaHisGlnPheLys 98
               |||||||||||||||||||||||||
Db         272 TCAGGTAATAGCCCACCAGTTCAAG 296

RESULT 11
US-09-878-281-31
; Sequence 31, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;     APPLICANT:
;     TITLE OF INVENTION:  New sequences of hepatitis C virus
;     TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;     NUMBER OF SEQUENCES:  270
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/09/878,281
;       FILING DATE:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/362,455
;       FILING DATE:
;   INFORMATION FOR SEQ ID NO:  31:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  401 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  cDNA
;     HYPOTHETICAL:  NO
```

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;    ANTI-SENSE:  NO
;    IMMEDIATE SOURCE:
;      CLONE:  HD10-1-25
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  3..401
US-09-878-281-31

Alignment Scores:
Pred. No.:                8.72e-47        Length:          401
Score:                    52.00           Matches:         87
Percent Similarity:       97.75%          Conservative:    0
Best Local Similarity:    97.75%          Mismatches:      1
Query Match:              39.10%          Indels:          2
DB:                       10              Gaps:            0

US-09-638-693-36 (1-133) x US-09-878-281-31 (1-401)

Qy          11 ThrLysTyrIleMetAlaCysMetSerAlaAspLeuGluValThrThrSerThrTrpVal 30
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          33 ACAAAATACATTATGGCATGCATGTCAGCTGATCTGGAAGTAACCACCAGCACCTGGGTG 92

Qy          31 LeuLeuGlyGlyValLeuAlaAlaLeuAlaAlaTyrCysLeuSerValGlyCysValVal 50
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          93 TTGCTTGGAGGGGTCCTCGCGGCCCTAGCGGCCTACTGCTTGTCAGTCGGCTGCGTTGTA 152

Qy          51 IleValGlyHisIleGluLeuGlyGlyLysProAlaIle-ValProAspLysGluValLe 70
               ||||||||||||||||||||||||||||||||||||    ||||||||||||||||||||
Db         153 ATCGTGGGTCATATCGAGCTGGGGGGCAAGCCGGCACT-CGTTCCAGACAAGGAGGTGTT 211

Qy          70 uTyrGlnGlnTyrAspGluMetGluGluCysSerGlnAlaAlaProTyrIleGluGlnAl 90
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         212 GTATCAACAGTACGATGAGATGGAGGAGTGCTCGCAAGCCGCCCCATACATCGAACAAGC 271

Qy          90 aGlnValIleAlaHisGlnPheLys 98
               |||||||||||||||||||||||||
Db         272 TCAGGTAATAGCCCACCAGTTCAAG 296

RESULT 12
US-09-878-281-33
; Sequence 33, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/878,281
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  33:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  401 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    IMMEDIATE SOURCE:
;      CLONE:  HD10-1-3
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  3..401
US-09-878-281-33

Alignment Scores:
Pred. No.:                8.72e-47        Length:          401
Score:                    52.00           Matches:         87
Percent Similarity:       97.75%          Conservative:    0
Best Local Similarity:    97.75%          Mismatches:      1
Query Match:              39.10%          Indels:          2
DB:                       10              Gaps:            0

US-09-638-693-36 (1-133) x US-09-878-281-33 (1-401)

Qy          11 ThrLysTyrIleMetAlaCysMetSerAlaAspLeuGluValThrThrSerThrTrpVal 30
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          33 ACAAAATACATTATGGCATGCATGTCAGCTGATCTGGAAGTAACCACCAGCACCTGGGTG 92

Qy          31 LeuLeuGlyGlyValLeuAlaAlaLeuAlaAlaTyrCysLeuSerValGlyCysValVal 50
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          93 TTGCTTGGAGGGGTCCTCGCGGCCCTAGCGGCCTACTGCTTGTCAGTCGGCTGCGTTGTA 152

Qy          51 IleValGlyHisIleGluLeuGlyGlyLysProAlaIle-ValProAspLysGluValLe 70
               ||||||||||||||||||||||||||||||||||||    ||||||||||||||||||||
Db         153 ATCGTGGGTCATATCGAGCTGGGGGGCAAGCCGGCACT-CGTTCCAGACAAGGAGGTGTT 211

Qy          70 uTyrGlnGlnTyrAspGluMetGluGluCysSerGlnAlaAlaProTyrIleGluGlnAl 90
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         212 GTATCAACAGTACGATGAGATGGAGGAGTGCTCGCAAGCCGCCCCATACATCGAACAAGC 271

Qy          90 aGlnValIleAlaHisGlnPheLys 98
               |||||||||||||||||||||||||
Db         272 TCAGGTAATAGCCCACCAGTTCAAG 296

RESULT 13
US-10-396-964-16
; Sequence 16, Application US/10396964
; Publication No. US20030198946A1
;  GENERAL INFORMATION:
;    APPLICANT:  Simmonds, Peter
;    APPLICANT:  Chan, Shiu-Wan
;    APPLICANT:  Yap, Peng L.
;    TITLE OF INVENTION:  Hepatitis-C Virus Testing
;    NUMBER OF SEQUENCES:  53
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Bell, Seltzer, Park & Gibson, P.A.
;      STREET:  1211 East Morehead Street
;      CITY:  Charlotte
;      STATE:  No. US20030198946A1th Carolina
;      COUNTRY:  United States
;      ZIP:  28234
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/10/396,964
;      FILING DATE:  23-MARCH-2003
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/244,116B
;      FILING DATE:  15-JUL-1994
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/GB92/02143
;      FILING DATE:  20-NOV-1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Sibley, Kenneth D.
;      REGISTRATION NUMBER:  31,665
;      REFERENCE/DOCKET NUMBER:  1749-125
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  704-377-1561
;      TELEFAX:  704-334-2014
;  INFORMATION FOR SEQ ID NO:  16:
;    SEQUENCE CHARACTERISTICS:
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;      LENGTH:  367 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    ORIGINAL SOURCE:
;      ORGANISM:  Hepatitis-C virus
US-10-396-964-16

Alignment Scores:
Pred. No.:                1.64e-42        Length:         367
Score:                    48.00           Matches:        83
Percent Similarity:       97.65%          Conservative:   0
Best Local Similarity:    97.65%          Mismatches:     1
Query Match:              36.09%          Indels:         2
DB:                       14              Gaps:           0

US-09-638-693-36 (1-133) x US-10-396-964-16 (1-367)

Qy          15 MetAlaCysMetSerAlaAspLeuGluValThrThrSerThrTrpValLeuLeuGlyGly 34
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          26 AUGGCAUGYAUGUCAGCUGAUCUGGAAGUAACCACCAGCACCUGGGUGUUGCUUGGAGGR 85

Qy          35 ValLeuAlaAlaLeuAlaAlaTyrCysLeuSerValGlyCysValValIleValGlyHis 54
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          86 GUCCUCGCKGCCCUAGCGGCCUACUGCUUGUCAGUCGGCUGCGUUGUGAUUGUGGGYCAU 145

Qy          55 IleGluLeuGlyGlyLysProAlaIle-ValProAspLysGluValLeuTyrGlnGlnTy 74
               |||||||||||||||||||||||    ||||||||||||||||||||||||||||||||
Db         146 AUUGAGCUGGGRGGCAAGCCVGCAMU-CGUUCCAGACAARGARGUGUUGUAUCAACAAUA 204

Qy          74 rAspGluMetGluGluCysSerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAl 94
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         205 CGAUGAGAUGGAGGAGUGCUCGCAAGCYGCCCCAUAUAUCGAACAAGCUCARGURAUAGC 264

Qy          94 aHisGlnPheLys 98
               ||||||||||||
Db         265 CCACCAGUUCAAG 277

RESULT 14
US-09-881-239-4
; Sequence 4, Application US/09881239
; Publication No. US20020192639A1
; GENERAL INFORMATION:
;  APPLICANT: CHIEN, David Y.
;  APPLICANT:  ARCANGEL, Phillip
;  APPLICANT:  TANDESKE, Laura
;  APPLICANT:  GEORGE-NASCIEMENTO, Carlos
;  APPLICANT:  COIT, Doris
;  APPLICANT:  MEDINA-SELBY, Angelica
;  TITLE OF INVENTION: HCV ANTIGEN/ANTIBODY COMBINATION ASSAY
;  FILE REFERENCE: 2302-16073 / PP16073.003
;  CURRENT APPLICATION NUMBER: US/09/881,239
;  CURRENT FILING DATE:  2001-06-14
;  NUMBER OF SEQ ID NOS: 8
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
;   LENGTH: 2499
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:  MEFA 12
;   NAME/KEY: CDS
;   LOCATION: (1)..(2487)
US-09-881-239-4

Alignment Scores:
Pred. No.:                3.33e-34        Length:         2499
Score:                    41.00           Matches:        41
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              30.83%          Indels:         0
DB:                       9               Gaps:           0

US-09-638-693-36 (1-133) x US-09-881-239-4 (1-2499)

Qy          58 GlyGlyLysProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMet 77
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        1330 GGGGGCAAGCCGGCAATCGTTCCAGACAAAGAGGTGTTGTATCAACAATACGATGAGATG 1389

Qy          78 GluGluCysSerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPhe 97
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        1390 GAAGAGTGCTCACAAGCTGCCCCATATATCGAACAAGCTCAGGTAATAGCTCACCAGTTC 1449

Qy          98 Lys 98
               |||
Db        1450 AAG 1452

RESULT 15
US-09-881-654-3
; Sequence 3, Application US/09881654
; Patent No. US20020146685A1
; GENERAL INFORMATION:
;  APPLICANT: CHIEN, David Y.
;  APPLICANT:  ARCANGEL, Phillip
;  APPLICANT:  TANDESKE, Laura
;  APPLICANT:  GEORGE-NASCIEMENTO, Carlos
;  APPLICANT:  COLT, Doris
;  APPLICANT:  MEDINA-SELBY, Angelica
;  TITLE OF INVENTION: IMMUNOASSAYS FOR ANTI-HCV ANTIBODIES
;  FILE REFERENCE: 2302-17039 / PP17039.002
;  CURRENT APPLICATION NUMBER: US/09/881,654
;  CURRENT FILING DATE:  2001-06-14
;  PRIOR APPLICATION NUMBER: 60/212,082
;  PRIOR FILING DATE: 2000-06-15
;  PRIOR APPLICATION NUMBER: 60/280,811
;  PRIOR FILING DATE: 2001-04-02
;  PRIOR APPLICATION NUMBER: 60/280,867
;  PRIOR FILING DATE: 2001-04-02
;  NUMBER OF SEQ ID NOS: 7
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3
;   LENGTH: 3297
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:  MEFA 7.1
;   NAME/KEY: CDS
;   LOCATION: (1)..(3297)
US-09-881-654-3

Alignment Scores:
Pred. No.:                4.29e-34        Length:         3297
Score:                    41.00           Matches:        41
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              30.83%          Indels:         0
DB:                       9               Gaps:           0

US-09-638-693-36 (1-133) x US-09-881-654-3 (1-3297)

Qy          58 GlyGlyLysProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMet 77
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        2242 GGGGGCAAGCCGGCAATCGTTCCAGACAAAGAGGTGTTGTATCAACAATACGATGAGATG 2301

Qy          78 GluGluCysSerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPhe 97
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        2302 GAAGAGTGCTCACAAGCTGCCCCATATATCGAACAAGCTCAGGTAATAGCTCACCAGTTC 2361

Qy          98 Lys 98
               |||
Db        2362 AAG 2364
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Search completed: February 27, 2004, 23:48:54
Job time : 255 secs

GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: February 25, 2004, 01:46:44 ; Search time 22 Seconds
(without alignments)
312.102 Million cell updates/sec

Title: US-09-638-693-36
Perfect score: 699
Sequence: 1 QNEICLTHPITKYIMACMSA.....VIEPIVTTNWQKLEAFWHKH 133

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_AA:*
1: /cgn2_6/ptodata/2/iaa/5A_COMB.pep:*
2: /cgn2_6/ptodata/2/iaa/5B_COMB.pep:*
3: /cgn2_6/ptodata/2/iaa/6A_COMB.pep:*
4: /cgn2_6/ptodata/2/iaa/6B_COMB.pep:*
5: /cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:*
6: /cgn2_6/ptodata/2/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	572	81.8	128	1	US-08-244-116B-17	Sequence 17, Appl
2	539	77.1	3012	3	US-08-811-566-2	Sequence 2, Appli
3	539	77.1	3012	4	US-09-034-756-2	Sequence 2, Appli
4	534	76.4	313	2	US-08-483-695-45	Sequence 45, Appl
5	534	76.4	313	2	US-07-965-285-45	Sequence 45, Appl
6	534	76.4	313	2	US-08-487-231-45	Sequence 45, Appl
7	534	76.4	313	3	US-09-201-912-45	Sequence 45, Appl
8	534	76.4	382	3	US-08-444-818-68	Sequence 68, Appl
9	534	76.4	460	3	US-08-444-818-20	Sequence 20, Appl
10	534	76.4	592	3	US-08-867-611-47	Sequence 47, Appl
11	534	76.4	592	4	US-09-690-359-47	Sequence 47, Appl
12	534	76.4	594	3	US-08-867-611-48	Sequence 48, Appl
13	534	76.4	594	4	US-09-690-359-48	Sequence 48, Appl
14	534	76.4	597	3	US-08-867-611-16	Sequence 16, Appl
15	534	76.4	597	4	US-09-690-359-16	Sequence 16, Appl
16	534	76.4	597	5	PCT-US92-06965A-21	Sequence 21, Appl
17	534	76.4	599	3	US-08-867-611-18	Sequence 18, Appl
18	534	76.4	599	4	US-09-690-359-18	Sequence 18, Appl
19	534	76.4	599	5	PCT-US92-06965A-23	Sequence 23, Appl
20	534	76.4	613	3	US-08-867-611-49	Sequence 49, Appl
21	534	76.4	613	4	US-09-690-359-49	Sequence 49, Appl
22	534	76.4	739	3	US-08-444-818-148	Sequence 148, App
23	534	76.4	859	3	US-08-444-818-30	Sequence 30, Appl
24	534	76.4	971	3	US-08-867-611-52	Sequence 52, Appl
25	534	76.4	971	4	US-09-690-359-52	Sequence 52, Appl
26	534	76.4	973	3	US-08-867-611-53	Sequence 53, Appl
27	534	76.4	973	4	US-09-690-359-53	Sequence 53, Appl
28	534	76.4	992	3	US-08-867-611-54	Sequence 54, Appl
29	534	76.4	992	4	US-09-690-359-54	Sequence 54, Appl
30	534	76.4	1021	1	US-07-910-760-12	Sequence 12, Appl
31	534	76.4	1021	1	US-08-440-519-12	Sequence 12, Appl
32	534	76.4	1021	4	US-08-440-549-12	Sequence 12, Appl
33	534	76.4	2261	3	US-08-444-818-66	Sequence 66, Appl
34	534	76.4	2436	3	US-08-444-818-75	Sequence 75, Appl
35	534	76.4	2772	3	US-08-444-818-89	Sequence 89, Appl
36	534	76.4	2894	2	US-08-466-975A-23	Sequence 23, Appl
37	534	76.4	2894	2	US-08-391-671A-23	Sequence 23, Appl
38	534	76.4	2894	3	US-08-467-902A-23	Sequence 23, Appl
39	534	76.4	2894	3	US-09-275-265-23	Sequence 23, Appl
40	534	76.4	2894	4	US-09-941-611-23	Sequence 23, Appl
41	534	76.4	2955	2	US-08-443-260-3	Sequence 3, Appli
42	534	76.4	2955	3	US-08-442-805A-3	Sequence 3, Appli
43	534	76.4	2955	3	US-08-443-900A-3	Sequence 3, Appli
44	534	76.4	2955	3	US-08-444-818-124	Sequence 124, App
45	534	76.4	2955	3	US-08-249-843-3	Sequence 3, Appli

ALIGNMENTS

RESULT 1
US-08-244-116B-17
; Sequence 17, Application US/08244116B
; Patent No. 5763159
; GENERAL INFORMATION:
; APPLICANT: Simmonds, Peter
; APPLICANT: Chan, Shiu-Wan
; APPLICANT: Yap, Peng L.
; TITLE OF INVENTION: Hepatitis-C Virus Testing
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Bell, Seltzer, Park & Gibson, P.A.
; STREET: 1211 East Morehead Street
; CITY: Charlotte
; STATE: No. 5763159th Carolina
; COUNTRY: United States
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0. Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/244,116B
; FILING DATE: 15-JUL-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/GB92/02143
; FILING DATE: 20-NOV-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 1749-125
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 704-377-1561
; TELEFAX: 704-334-2014
; INFORMATION FOR SEQ ID NO: 17:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 128 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: yes
; FRAGMENT TYPE: internal
; ORIGINAL SOURCE:
; ORGANISM: Hepatitis-C virus
US-08-244-116B-17

Query Match 81.8%; Score 572; DB 1; Length 128;

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  Best Local Similarity   94.9%;  Pred. No. 3.5e-59;
  Matches  111;  Conservative    0;  Mismatches    6;  Indels    0;  Gaps    0;

Qy          8 HPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGKPAIVPDK 67
              ||  || |||||||||||||||||||||||||||||||||||||||||||||||| ||||
Db          2 HPXXKYXMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGKPAXVPDK 61

Qy         68 EVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVTTNWQ 124
              |||||||||||||||||||||||||||||| |||||||||||||||||| ||||
Db         62 EVLYQQYDEMEECSQAAPYIEQAQVIAHQFKEKVLGLLQRATQQQAVIEPIVATNWQ 118


RESULT 2
US-08-811-566-2
; Sequence 2, Application US/08811566
; Patent No. 6127116
;  GENERAL INFORMATION:
;    APPLICANT:  Rice, Charles  et al.
;    TITLE OF INVENTION:  FUNCTIONAL DNA CLONE FOR HEPATITIS C
;    TITLE OF INVENTION:  VIRUS (HCV) AND USES THEREOF
;    NUMBER OF SEQUENCES:  21
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  David A. Jackson, Esq.
;      STREET:  411 Hackensack Ave, Continental Plaza, 4th
;      STREET:  Floor
;      CITY:  Hackensack
;      STATE:  New Jersey
;      COUNTRY:  USA
;      ZIP:  07601
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/811,566
;      FILING DATE:  03-MAR-1997
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Jackson Esq., David A.
;      REGISTRATION NUMBER:  26,742
;      REFERENCE/DOCKET NUMBER:  1113-1-006
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  201-487-5800
;      TELEFAX:  201-343-1684
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  3012 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
;    HYPOTHETICAL:  NO
;    FRAGMENT TYPE:  N-terminal
US-08-811-566-2

  Query Match             77.1%;  Score 539;  DB 3;  Length 3012;
  Best Local Similarity   75.9%;  Pred. No. 1.8e-53;
  Matches  101;  Conservative   10;  Mismatches   22;  Indels    0;  Gaps    0;

Qy          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
              |||: |||||||||| |||||||| ||||||:||||||||||||| ||||||| | | ||
Db       1632 QNEVTLTHPITKYIMTCMSADLEVVTSTWVLVGGVLAALAAYCLSTGCVVIVGRIVLSGK 1691

Qy         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
              |||:||:|||||::|||||||  |||||  ::| ||| | ||||| |::|  || | |
Db       1692 PAIIPDREVLYQEFDEMEECSQHLPYIEQGMMLAEQFKQKALGLLQTASRQAEVITPAVQ 1751

Qy        121 TNWQKLEAFWHKH 133
              ||||||| || ||
Db       1752 TNWQKLEVFWAKH 1764


RESULT 3
US-09-034-756-2
; Sequence 2, Application US/09034756
; Patent No. 6392028
;   GENERAL INFORMATION:
;        APPLICANT: RICE, CHARLES  et al.
;        TITLE OF INVENTION: FUNCTIONAL DNA CLONE FOR HEPATITIS C
;                            VIRUS (HCV) AND USES THEREOF
;        NUMBER OF SEQUENCES: 21
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: HOWELL & HAFERKAMP, L.C.
;             STREET: 7733 FORSYTH BLVD., SUITE 1400
;             CITY: ST. LOUIS
;             STATE: MO
;             COUNTRY: USA
;             ZIP: 63105
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: PatentIn Release #1.0, Version #1.30
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/034,756
;             FILING DATE: 04-May-1998
;             CLASSIFICATION: <Unknown>
;        ATTORNEY/AGENT INFORMATION:
;             NAME: HOLLAND, DONALD R.
;             REGISTRATION NUMBER: 35,197
;             REFERENCE/DOCKET NUMBER: 6029-4831
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: 314-727-5188
;             TELEFAX: 314-727-6092
;   INFORMATION FOR SEQ ID NO: 2:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 3012 amino acids
;             TYPE: amino acid
;             STRANDEDNESS: single
;             TOPOLOGY: linear
;        MOLECULE TYPE: protein
;        HYPOTHETICAL: NO
;        FRAGMENT TYPE: N-terminal
;        SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-034-756-2

  Query Match             77.1%;  Score 539;  DB 4;  Length 3012;
  Best Local Similarity   75.9%;  Pred. No. 1.8e-53;
  Matches  101;  Conservative   10;  Mismatches   22;  Indels    0;  Gaps    0;

Qy          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
              |||: |||||||||| |||||||| ||||||:||||||||||||| ||||||| | | ||
Db       1632 QNEVTLTHPITKYIMTCMSADLEVVTSTWVLVGGVLAALAAYCLSTGCVVIVGRIVLSGK 1691

Qy         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
              |||:||:|||||::|||||||  |||||  ::| ||| | ||||| |::|  || | |
Db       1692 PAIIPDREVLYQEFDEMEECSQHLPYIEQGMMLAEQFKQKALGLLQTASRQAEVITPAVQ 1751

Qy        121 TNWQKLEAFWHKH 133
              ||||||| || ||
Db       1752 TNWQKLEVFWAKH 1764


RESULT 4
US-08-483-695-45
; Sequence 45, Application US/08483695
; Patent No. 5866139
;  GENERAL INFORMATION:
;    APPLICANT:  Brechot, Christian
;    APPLICANT:  Kremsdorf, Dina
;    APPLICANT:  Porchon, Colette
;    TITLE OF INVENTION:  Nucleotide and Peptide Sequences of a
;    TITLE OF INVENTION:  Hepatitis C Virus Isolate, Diagnostic and Therapeutic
;    TITLE OF INVENTION:  Applications
;    NUMBER OF SEQUENCES:  46
```

```
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  Finnegan, Henderson, Farabow, Garrett &
;       ADDRESSEE:  Dunner
;       STREET:  1300 I Street, N.W.
;       CITY:  Washington
;       STATE:  DC
;       COUNTRY:  USA
;       ZIP:  20005-3315
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/483,695
;       FILING DATE:
;       CLASSIFICATION:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US/07/965,285
;       FILING DATE:  18-MAR-1993
;       APPLICATION NUMBER:  FR 91 06 882
;       FILING DATE:  06-JUN-1991
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Meyers, Kenneth J.
;       REGISTRATION NUMBER:  25,146
;       REFERENCE/DOCKET NUMBER:  05286-0001-00000
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  202-408-4000
;       TELEFAX:  202-408-4400
;   INFORMATION FOR SEQ ID NO:  45:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  313 amino acids
;       TYPE:  amino acid
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  peptide
US-08-483-695-45

  Query Match             76.4%;  Score 534;  DB 2;  Length 313;
  Best Local Similarity   74.4%;  Pred. No. 3.3e-54;
  Matches   99;  Conservative   12;  Mismatches   22;  Indels    0;  Gaps    0;

Qy          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
              |||| |||||:||||| |||||||| |||||||:|||||||||||||| ||||||| : | ||
Db        178 QNEITLTHPVTKYIMTCMSADLEVVTSTWVLVGGVLAALAAYCLSTGCVVIVGRVVLSGK 237

Qy         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
              |||:||:||||:::|||||||  |||||  ::| ||| | ||||| |::|  || | ||
Db        238 PAIIPDREVLYREFDEMEECSQHLPYIEQGMMLAEQFKQKALGLLQTASRQAEVIAPAVE 297

Qy        121 TNWQKLEAFWHKH 133
              |||||||  || ||
Db        298 TNWQKLETFWAKH 310


RESULT 5
US-07-965-285-45
; Sequence 45, Application US/07965285
; Patent No. 5879904
;  GENERAL INFORMATION:
;     APPLICANT:  Brechot, Christian
;     APPLICANT:  Kremsdorf, Dina
;     APPLICANT:  Porchon, Colette
;     TITLE OF INVENTION:  Nucleotide and Peptide Sequences of a
;     TITLE OF INVENTION:  Hepatitis C Virus Isolate, Diagnostic and Therapeutic
;     TITLE OF INVENTION:  Applications
;     NUMBER OF SEQUENCES:  46
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  Finnegan, Henderson, Farabow, Garrett &
;       ADDRESSEE:  Dunner
;       STREET:  1300 I Street, N.W.
;       CITY:  Washington
;       STATE:  DC
;       COUNTRY:  USA
;       ZIP:  20005-3315
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/07/965,285
;       FILING DATE:  18-MAR-1993
;       CLASSIFICATION:  435
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  FR 91 06 882
;       FILING DATE:  06-JUN-1991
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Meyers, Kenneth J.
;       REGISTRATION NUMBER:  25,146
;       REFERENCE/DOCKET NUMBER:  05286-0001-00000
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  202-408-4000
;       TELEFAX:  202-408-4400
;   INFORMATION FOR SEQ ID NO:  45:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  313 amino acids
;       TYPE:  amino acid
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  peptide
US-07-965-285-45

  Query Match             76.4%;  Score 534;  DB 2;  Length 313;
  Best Local Similarity   74.4%;  Pred. No. 3.3e-54;
  Matches   99;  Conservative   12;  Mismatches   22;  Indels    0;  Gaps    0;

Qy          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
              |||| |||||:||||| |||||||| |||||||:|||||||||||||| ||||||| : | ||
Db        178 QNEITLTHPVTKYIMTCMSADLEVVTSTWVLVGGVLAALAAYCLSTGCVVIVGRVVLSGK 237

Qy         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
              |||:||:||||:::|||||||  |||||  ::| ||| | ||||| |::|  || | ||
Db        238 PAIIPDREVLYREFDEMEECSQHLPYIEQGMMLAEQFKQKALGLLQTASRQAEVIAPAVE 297

Qy        121 TNWQKLEAFWHKH 133
              |||||||  || ||
Db        298 TNWQKLETFWAKH 310


RESULT 6
US-08-487-231-45
; Sequence 45, Application US/08487231
; Patent No. 5919454
;  GENERAL INFORMATION:
;     APPLICANT:  Brechot, Christian
;     APPLICANT:  Kremsdorf, Dina
;     APPLICANT:  Porchon, Colette
;     TITLE OF INVENTION:  Nucleotide and Peptide Sequences of a
;     TITLE OF INVENTION:  Hepatitis C Virus Isolate, Diagnostic and Therapeutic
;     TITLE OF INVENTION:  Applications
;     NUMBER OF SEQUENCES:  46
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  Finnegan, Henderson, Farabow, Garrett &
;       ADDRESSEE:  Dunner
;       STREET:  1300 I Street, N.W.
;       CITY:  Washington
;       STATE:  DC
;       COUNTRY:  USA
;       ZIP:  20005-3315
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/487,231
;       FILING DATE:  07-JUNE-1995
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;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/965,285
;      FILING DATE:  18-MAR-1993
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  FR 91 06 882
;      FILING DATE:  06-JUN-1991
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Meyers, Kenneth J.
;      REGISTRATION NUMBER:  25,146
;      REFERENCE/DOCKET NUMBER:  05286-0001-02000
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  202-408-4000
;      TELEFAX:  202-408-4400
;  INFORMATION FOR SEQ ID NO:  45:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  313 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
US-08-487-231-45

  Query Match             76.4%;  Score 534;  DB 2;  Length 313;
  Best Local Similarity   74.4%;  Pred. No. 3.3e-54;
  Matches   99;  Conservative   12;  Mismatches   22;  Indels    0;  Gaps    0;

Qy          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
              |||| |||:|||| |||||||| ||||||:|||||||||||||| ||||||| : | ||
Db        178 QNEITLTHPVTKYIMTCMSADLEVVTSTWVLVGGVLAALAAYCLSTGCVVIVGRVVLSGK 237

Qy         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
              |||:||:||||:::|||||||  ||||  ::| ||| | |||| |::|  || | |
Db        238 PAIIPDREVLYREFDEMEECSQHLPYIEQGMMLAEQFKQKALGLLQTASRQAEVIAPAVE 297

Qy        121 TNWQKLEAFWHKH 133
              ||||||| || ||
Db        298 TNWQKLETFWAKH 310


RESULT 7
US-09-201-912-45
; Sequence 45, Application US/09201912
; Patent No. 6210962
;  GENERAL INFORMATION:
;    APPLICANT:  Brechot, Christian
;    APPLICANT:  Kremsdorf, Dina
;    APPLICANT:  Porchon, Colette
;    TITLE OF INVENTION:  Nucleotide and Peptide Sequences of a
;    TITLE OF INVENTION:  Hepatitis C Virus Isolate, Diagnostic and Therapeutic
;    TITLE OF INVENTION:  Applications
;    NUMBER OF SEQUENCES:  46
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Finnegan, Henderson, Farabow, Garrett &
;      ADDRESSEE:  Dunner
;      STREET:  1300 I Street, N.W.
;      CITY:  Washington
;      STATE:  DC
;      COUNTRY:  USA
;      ZIP:  20005-3315
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/201,912
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/965,285
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Meyers, Kenneth J.
;      REGISTRATION NUMBER:  25,146
;      REFERENCE/DOCKET NUMBER:  05286-0001-00000
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  202-408-4000
;      TELEFAX:  202-408-4400
;  INFORMATION FOR SEQ ID NO:  45:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  313 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
US-09-201-912-45

  Query Match             76.4%;  Score 534;  DB 3;  Length 313;
  Best Local Similarity   74.4%;  Pred. No. 3.3e-54;
  Matches   99;  Conservative   12;  Mismatches   22;  Indels    0;  Gaps    0;

Qy          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
              |||| |||:|||| |||||||| ||||||:|||||||||||||| ||||||| : | ||
Db        178 QNEITLTHPVTKYIMTCMSADLEVVTSTWVLVGGVLAALAAYCLSTGCVVIVGRVVLSGK 237

Qy         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
              |||:||:||||:::|||||||  ||||  ::| ||| | |||| |::|  || | |
Db        238 PAIIPDREVLYREFDEMEECSQHLPYIEQGMMLAEQFKQKALGLLQTASRQAEVIAPAVE 297

Qy        121 TNWQKLEAFWHKH 133
              ||||||| || ||
Db        298 TNWQKLETFWAKH 310


RESULT 8
US-08-444-818-68
; Sequence 68, Application US/08444818
; Patent No. 6150087
;  GENERAL INFORMATION:
;    APPLICANT:  Chien, David Y.
;    APPLICANT:  Rutter, William J.
;    TITLE OF INVENTION:  NANBV Diagnostics and Vaccines
;    NUMBER OF SEQUENCES:  777
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Chiron Corporation
;      STREET:  4560 Horton Street
;      CITY:  Emeryville
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94608-2916
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/444,818
;      FILING DATE:
;      CLASSIFICATION:  424
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/403,590
;      FILING DATE:  14-MAR-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Harbin, Alisa A.
;      REGISTRATION NUMBER:  33,895
;      REFERENCE/DOCKET NUMBER:  0110.002
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (508)359-3876
;      TELEFAX:  (508)359-3885
;  INFORMATION FOR SEQ ID NO:  68:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  382 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-444-818-68
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  Query Match             76.4%;  Score 534;  DB 3;  Length 382;
  Best Local Similarity   74.4%;  Pred. No. 4.3e-54;
  Matches   99;  Conservative   12;  Mismatches   22;  Indels    0;  Gaps    0;

Qy          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
              |||| |||||:||||| |||||||| |||||:|||||||||||||| ||||||| : | ||
Db         78 QNEITLTHPVTKYIMTCMSADLEVVTSTWVLVGGVLAALAAYCLSTGCVVIVGRVVLSGK 137

Qy         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
              |||:||:||||:::|||||||  |||||  ::| ||| | ||||| |::|  || | |
Db        138 PAIIPDREVLYREFDEMEECSQHLPYIEQGMMLAEQFKQKALGLLQTASRQAEVIAPAVQ 197

Qy        121 TNWQKLEAFWHKH 133
              ||||||| || ||
Db        198 TNWQKLETFWAKH 210


RESULT 9
US-08-444-818-20
; Sequence 20, Application US/08444818
; Patent No. 6150087
;  GENERAL INFORMATION:
;    APPLICANT:  Chien, David Y.
;    APPLICANT:  Rutter, William J.
;    TITLE OF INVENTION:  NANBV Diagnostics and Vaccines
;    NUMBER OF SEQUENCES:  777
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Chiron Corporation
;      STREET:  4560 Horton Street
;      CITY:  Emeryville
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94608-2916
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/444,818
;      FILING DATE:
;      CLASSIFICATION:  424
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/403,590
;      FILING DATE:  14-MAR-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Harbin, Alisa A.
;      REGISTRATION NUMBER:  33,895
;      REFERENCE/DOCKET NUMBER:  0110.002
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (508)359-3876
;      TELEFAX:  (508)359-3885
;  INFORMATION FOR SEQ ID NO:  20:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  460 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-444-818-20

  Query Match             76.4%;  Score 534;  DB 3;  Length 460;
  Best Local Similarity   74.4%;  Pred. No. 5.5e-54;
  Matches   99;  Conservative   12;  Mismatches   22;  Indels    0;  Gaps    0;

Qy          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
              |||| |||||:||||| |||||||| |||||:|||||||||||||| ||||||| : | ||
Db        162 QNEITLTHPVTKYIMTCMSADLEVVTSTWVLVGGVLAALAAYCLSTGCVVIVGRVVLSGK 221

Qy         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
              |||:||:||||:::|||||||  |||||  ::| ||| | ||||| |::|  || | |
Db        222 PAIIPDREVLYREFDEMEECSQHLPYIEQGMMLAEQFKQKALGLLQTASRQAEVIAPAVQ 281

Qy        121 TNWQKLEAFWHKH 133
              ||||||| || ||
Db        282 TNWQKLETFWAKH 294


RESULT 10
US-08-867-611-47
; Sequence 47, Application US/08867611
; Patent No. 6172189
;  GENERAL INFORMATION:
;    APPLICANT:  DEVARE, SUSHIL G
;    APPLICANT:  DESAI, SURESH M
;    APPLICANT:  CASEY, JAMES M
;    APPLICANT:  DAILEY, STEPHEN H
;    APPLICANT:  DAWSON, GEORGE J
;    APPLICANT:  GUTIERREZ, ROBIN A
;    APPLICANT:  LESNIEWSKI, RICHARD R
;    APPLICANT:  STEWART, JAMES L
;    APPLICANT:  RUPPRECHT, KEVIN R
;    TITLE OF INVENTION:  HEPATITIS C ASSAY UTILIZING RECOMBINANT
;    TITLE OF INVENTION:  ANTIGENS
;    NUMBER OF SEQUENCES:  59
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  ABBOTT LABORATORIES
;      STREET:  ONE ABBOTT PARK ROAD, CHAD377/AP6D2
;      CITY:  ABBOTT PARK
;      STATE:  IL
;      COUNTRY:  USA
;      ZIP:  60064-3500
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/867,611
;      FILING DATE:  02-JUN-1997
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/646,757
;      FILING DATE:
;      APPLICATION NUMBER:  US/08/179,896
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/572,822
;      FILING DATE:  24-AUG-1990
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/614,069
;      FILING DATE:  07-NOV-1990
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/748,561
;      FILING DATE:  21-AUG-1991
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/748,565
;      FILING DATE:  21-AUG-1991
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/748,566
;      FILING DATE:  21-AUG-1991
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  POREMBSKI, PRISCILLA E
;      REGISTRATION NUMBER:  33,207
;      REFERENCE/DOCKET NUMBER:  4834.US.P6
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  708-937-6365
;      TELEFAX:  708-937-9556
;  INFORMATION FOR SEQ ID NO:  47:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  592 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
US-08-867-611-47
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  Query Match             76.4%;  Score 534;  DB 3;  Length 592;
  Best Local Similarity   74.4%;  Pred. No. 7.7e-54;
  Matches   99;  Conservative   12;  Mismatches   22;  Indels    0;  Gaps    0;

Qy          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
              |||| |||||:||||| |||||||| |||||||:|||||||||||||| ||||||| : | ||
Db        288 QNEITLTHPVTKYIMTCMSADLEVVTSTWVLVGGVLAALAAYCLSTGCVVIVGRVVLSGK 347

Qy         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
              |||:||:||||:::|||||||  |||||  ::| ||| | ||||| |::|  || | |
Db        348 PAIIPDREVLYREFDEMEECSQHLPYIEQGMMLAEQFKQKALGLLQTASRQAEVIAPAVQ 407

Qy        121 TNWQKLEAFWHKH 133
              ||||||| || ||
Db        408 TNWQKLETFWAKH 420


RESULT 11
US-09-690-359-47
; Sequence 47, Application US/09690359
; Patent No. 6593083
;  GENERAL INFORMATION:
;       APPLICANT: DEVARE, SUSHIL G
;                  DESAI, SURESH M
;                  CASEY, JAMES M
;                  DAILEY, STEPHEN H
;                  DAWSON, GEORGE J
;                  GUTIERREZ, ROBIN A
;                  LESNIEWSKI, RICHARD R
;                  STEWART, JAMES L
;                  RUPPRECHT, KEVIN R
;       TITLE OF INVENTION: HEPATITIS C ASSAY UTILIZING RECOMBINANT
;                           ANTIGENS
;       NUMBER OF SEQUENCES: 59
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: ABBOTT LABORATORIES
;            STREET: ONE ABBOTT PARK ROAD, CHAD377/AP6D2
;            CITY: ABBOTT PARK
;            STATE: IL
;            COUNTRY: USA
;            ZIP: 60064-3500
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Floppy disk
;            COMPUTER: IBM PC compatible
;            OPERATING SYSTEM: PC-DOS/MS-DOS
;            SOFTWARE: PatentIn Release #1.0, Version #1.25
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/09/690,359
;            FILING DATE: 17-Oct-2000
;            CLASSIFICATION: <Unknown>
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: 08/867,611
;            FILING DATE: 02-JUN-1997
;            APPLICATION NUMBER: US/08/646,757
;            FILING DATE: <Unknown>
;            APPLICATION NUMBER: US/08/179,896
;            FILING DATE: <Unknown>
;            APPLICATION NUMBER: US 07/572,822
;            FILING DATE: 24-AUG-1990
;            APPLICATION NUMBER: US 07/614,069
;            FILING DATE: 07-NOV-1990
;            APPLICATION NUMBER: US 07/748,561
;            FILING DATE: 21-AUG-1991
;            APPLICATION NUMBER: US 07/748,565
;            FILING DATE: 21-AUG-1991
;            APPLICATION NUMBER: US 07/748,566
;            FILING DATE: 21-AUG-1991
;       ATTORNEY/AGENT INFORMATION:
;            NAME: POREMBSKI, PRISCILLA E
;            REGISTRATION NUMBER: 33,207
;            REFERENCE/DOCKET NUMBER: 4834.US.P6
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 708-937-6365
;            TELEFAX: 708-937-9556
;   INFORMATION FOR SEQ ID NO: 47:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 592 amino acids
;            TYPE: amino acid
;            STRANDEDNESS: single
;            TOPOLOGY: linear
;       MOLECULE TYPE: peptide
;       SEQUENCE DESCRIPTION: SEQ ID NO: 47:
US-09-690-359-47

  Query Match             76.4%;  Score 534;  DB 4;  Length 592;
  Best Local Similarity   74.4%;  Pred. No. 7.7e-54;
  Matches   99;  Conservative   12;  Mismatches   22;  Indels    0;  Gaps    0;

Qy          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
              |||| |||||:||||| |||||||| |||||||:|||||||||||||| ||||||| : | ||
Db        288 QNEITLTHPVTKYIMTCMSADLEVVTSTWVLVGGVLAALAAYCLSTGCVVIVGRVVLSGK 347

Qy         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
              |||:||:||||:::|||||||  |||||  ::| ||| | ||||| |::|  || | |
Db        348 PAIIPDREVLYREFDEMEECSQHLPYIEQGMMLAEQFKQKALGLLQTASRQAEVIAPAVQ 407

Qy        121 TNWQKLEAFWHKH 133
              ||||||| || ||
Db        408 TNWQKLETFWAKH 420


RESULT 12
US-08-867-611-48
; Sequence 48, Application US/08867611
; Patent No. 6172189
;  GENERAL INFORMATION:
;    APPLICANT:  DEVARE, SUSHIL G
;    APPLICANT:  DESAI, SURESH M
;    APPLICANT:  CASEY, JAMES M
;    APPLICANT:  DAILEY, STEPHEN H
;    APPLICANT:  DAWSON, GEORGE J
;    APPLICANT:  GUTIERREZ, ROBIN A
;    APPLICANT:  LESNIEWSKI, RICHARD R
;    APPLICANT:  STEWART, JAMES L
;    APPLICANT:  RUPPRECHT, KEVIN R
;    TITLE OF INVENTION:  HEPATITIS C ASSAY UTILIZING RECOMBINANT
;    TITLE OF INVENTION:  ANTIGENS
;    NUMBER OF SEQUENCES:  59
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  ABBOTT LABORATORIES
;      STREET:  ONE ABBOTT PARK ROAD, CHAD377/AP6D2
;      CITY:  ABBOTT PARK
;      STATE:  IL
;      COUNTRY:  USA
;      ZIP:  60064-3500
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/867,611
;      FILING DATE:  02-JUN-1997
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/646,757
;      FILING DATE:
;      APPLICATION NUMBER:  US/08/179,896
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/572,822
;      FILING DATE:  24-AUG-1990
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/614,069
;      FILING DATE:  07-NOV-1990
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;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/748,561
;      FILING DATE:  21-AUG-1991
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/748,565
;      FILING DATE:  21-AUG-1991
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/748,566
;      FILING DATE:  21-AUG-1991
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  POREMBSKI, PRISCILLA E
;      REGISTRATION NUMBER:  33,207
;      REFERENCE/DOCKET NUMBER:  4834.US.P6
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  708-937-6365
;      TELEFAX:  708-937-9556
;  INFORMATION FOR SEQ ID NO:  48:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  594 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
US-08-867-611-48

  Query Match             76.4%;  Score 534;  DB 3;  Length 594;
  Best Local Similarity   74.4%;  Pred. No. 7.7e-54;
  Matches   99;  Conservative   12;  Mismatches   22;  Indels    0;  Gaps    0;

Qy          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
              |||| |||||:||||| |||||||| |||||||:|||||||||||||| ||||||| : | ||
Db        290 QNEITLTHPVTKYIMTCMSADLEVVTSTWVLVGGVLAALAAYCLSTGCVVIVGRVVLSGK 349

Qy         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
              |||:||:||||:::|||||||  |||||  ::| ||| | ||||| |::|  || | ||
Db        350 PAIIPDREVLYREFDEMEECSQHLPYIEQGMMLAEQFKQKALGLLQTASRQAEVIAPAVQ 409

Qy        121 TNWQKLEAFWHKH 133
              ||||||| || ||
Db        410 TNWQKLETFWAKH 422


RESULT 13
US-09-690-359-48
; Sequence 48, Application US/09690359
; Patent No. 6593083
;  GENERAL INFORMATION:
;       APPLICANT: DEVARE, SUSHIL G
;                  DESAI, SURESH M
;                  CASEY, JAMES M
;                  DAILEY, STEPHEN H
;                  DAWSON, GEORGE J
;                  GUTIERREZ, ROBIN A
;                  LESNIEWSKI, RICHARD R
;                  STEWART, JAMES L
;                  RUPPRECHT, KEVIN R
;       TITLE OF INVENTION: HEPATITIS C ASSAY UTILIZING RECOMBINANT
;                           ANTIGENS
;       NUMBER OF SEQUENCES: 59
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: ABBOTT LABORATORIES
;            STREET: ONE ABBOTT PARK ROAD, CHAD377/AP6D2
;            CITY: ABBOTT PARK
;            STATE: IL
;            COUNTRY: USA
;            ZIP: 60064-3500
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Floppy disk
;            COMPUTER: IBM PC compatible
;            OPERATING SYSTEM: PC-DOS/MS-DOS
;            SOFTWARE: PatentIn Release #1.0, Version #1.25
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/09/690,359
;            FILING DATE: 17-Oct-2000
;            CLASSIFICATION: <Unknown>
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: 08/867,611
;            FILING DATE: 02-JUN-1997
;            APPLICATION NUMBER: US/08/646,757
;            FILING DATE: <Unknown>
;            APPLICATION NUMBER: US/08/179,896
;            FILING DATE: <Unknown>
;            APPLICATION NUMBER: US 07/572,822
;            FILING DATE: 24-AUG-1990
;            APPLICATION NUMBER: US 07/614,069
;            FILING DATE: 07-NOV-1990
;            APPLICATION NUMBER: US 07/748,561
;            FILING DATE: 21-AUG-1991
;            APPLICATION NUMBER: US 07/748,565
;            FILING DATE: 21-AUG-1991
;            APPLICATION NUMBER: US 07/748,566
;            FILING DATE: 21-AUG-1991
;       ATTORNEY/AGENT INFORMATION:
;            NAME: POREMBSKI, PRISCILLA E
;            REGISTRATION NUMBER: 33,207
;            REFERENCE/DOCKET NUMBER: 4834.US.P6
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 708-937-6365
;            TELEFAX: 708-937-9556
;  INFORMATION FOR SEQ ID NO: 48:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 594 amino acids
;            TYPE: amino acid
;            STRANDEDNESS: single
;            TOPOLOGY: linear
;       MOLECULE TYPE: peptide
;       SEQUENCE DESCRIPTION: SEQ ID NO: 48:
US-09-690-359-48

  Query Match             76.4%;  Score 534;  DB 4;  Length 594;
  Best Local Similarity   74.4%;  Pred. No. 7.7e-54;
  Matches   99;  Conservative   12;  Mismatches   22;  Indels    0;  Gaps    0;

Qy          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
              |||| |||||:||||| |||||||| |||||||:|||||||||||||| ||||||| : | ||
Db        290 QNEITLTHPVTKYIMTCMSADLEVVTSTWVLVGGVLAALAAYCLSTGCVVIVGRVVLSGK 349

Qy         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
              |||:||:||||:::|||||||  |||||  ::| ||| | ||||| |::|  || | ||
Db        350 PAIIPDREVLYREFDEMEECSQHLPYIEQGMMLAEQFKQKALGLLQTASRQAEVIAPAVQ 409

Qy        121 TNWQKLEAFWHKH 133
              ||||||| || ||
Db        410 TNWQKLETFWAKH 422


RESULT 14
US-08-867-611-16
; Sequence 16, Application US/08867611
; Patent No. 6172189
;  GENERAL INFORMATION:
;    APPLICANT:  DEVARE, SUSHIL G
;    APPLICANT:  DESAI, SURESH M
;    APPLICANT:  CASEY, JAMES M
;    APPLICANT:  DAILEY, STEPHEN H
;    APPLICANT:  DAWSON, GEORGE J
;    APPLICANT:  GUTIERREZ, ROBIN A
;    APPLICANT:  LESNIEWSKI, RICHARD R
;    APPLICANT:  STEWART, JAMES L
;    APPLICANT:  RUPPRECHT, KEVIN R
;    TITLE OF INVENTION:  HEPATITIS C ASSAY UTILIZING RECOMBINANT
;    TITLE OF INVENTION:  ANTIGENS
;    NUMBER OF SEQUENCES:  59
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  ABBOTT LABORATORIES
;      STREET:  ONE ABBOTT PARK ROAD, CHAD377/AP6D2
```

```
;       CITY:  ABBOTT PARK
;       STATE:  IL
;       COUNTRY:  USA
;       ZIP:  60064-3500
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/867,611
;       FILING DATE:  02-JUN-1997
;       CLASSIFICATION:  435
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/646,757
;       FILING DATE:
;       APPLICATION NUMBER:  US/08/179,896
;       FILING DATE:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 07/572,822
;       FILING DATE:  24-AUG-1990
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 07/614,069
;       FILING DATE:  07-NOV-1990
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 07/748,561
;       FILING DATE:  21-AUG-1991
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 07/748,565
;       FILING DATE:  21-AUG-1991
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 07/748,566
;       FILING DATE:  21-AUG-1991
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  POREMBSKI, PRISCILLA E
;       REGISTRATION NUMBER:  33,207
;       REFERENCE/DOCKET NUMBER:  4834.US.P6
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  708-937-6365
;       TELEFAX:  708-937-9556
;   INFORMATION FOR SEQ ID NO:  16:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  597 amino acids
;       TYPE:  amino acid
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  protein
US-08-867-611-16

  Query Match           76.4%;  Score 534;  DB 3;  Length 597;
  Best Local Similarity   74.4%;  Pred. No. 7.8e-54;
  Matches   99;  Conservative   12;  Mismatches   22;  Indels    0;  Gaps    0;

Qy          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
              |||| |||:||||| |||||||| ||||||:|||||||||||||| ||||||| : | ||
Db        288 QNEITLTHPVTKYIMTCMSADLEVVTSTWVLVGGVLAALAAYCLSTGCVVIVGRVVLSGK 347

Qy         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
              |||:||:||||:::|||||||  |||||  ::| ||| | ||||| |::|  || | |
Db        348 PAIIPDREVLYREFDEMEECSQHLPYIEQGMMLAEQFKQKALGLLQTASRQAEVIAPAVQ 407

Qy        121 TNWQKLEAFWHKH 133
              ||||||| || ||
Db        408 TNWQKLETFWAKH 420


RESULT 15
US-09-690-359-16
; Sequence 16, Application US/09690359
; Patent No. 6593083
;   GENERAL INFORMATION:
;       APPLICANT: DEVARE, SUSHIL G
;                  DESAI, SURESH M
;                  CASEY, JAMES M
;                  DAILEY, STEPHEN H
;                  DAWSON, GEORGE J
;                  GUTIERREZ, ROBIN A
;                  LESNIEWSKI, RICHARD R
;                  STEWART, JAMES L
;                  RUPPRECHT, KEVIN R
;       TITLE OF INVENTION: HEPATITIS C ASSAY UTILIZING RECOMBINANT
;                           ANTIGENS
;       NUMBER OF SEQUENCES: 59
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: ABBOTT LABORATORIES
;            STREET: ONE ABBOTT PARK ROAD, CHAD377/AP6D2
;            CITY: ABBOTT PARK
;            STATE: IL
;            COUNTRY: USA
;            ZIP: 60064-3500
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Floppy disk
;            COMPUTER: IBM PC compatible
;            OPERATING SYSTEM: PC-DOS/MS-DOS
;            SOFTWARE: PatentIn Release #1.0, Version #1.25
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/09/690,359
;            FILING DATE: 17-Oct-2000
;            CLASSIFICATION: <Unknown>
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: 08/867,611
;            FILING DATE: 02-JUN-1997
;            APPLICATION NUMBER: US/08/646,757
;            FILING DATE: <Unknown>
;            APPLICATION NUMBER: US/08/179,896
;            FILING DATE: <Unknown>
;            APPLICATION NUMBER: US 07/572,822
;            FILING DATE: 24-AUG-1990
;            APPLICATION NUMBER: US 07/614,069
;            FILING DATE: 07-NOV-1990
;            APPLICATION NUMBER: US 07/748,561
;            FILING DATE: 21-AUG-1991
;            APPLICATION NUMBER: US 07/748,565
;            FILING DATE: 21-AUG-1991
;            APPLICATION NUMBER: US 07/748,566
;            FILING DATE: 21-AUG-1991
;       ATTORNEY/AGENT INFORMATION:
;            NAME: POREMBSKI, PRISCILLA E
;            REGISTRATION NUMBER: 33,207
;            REFERENCE/DOCKET NUMBER: 4834.US.P6
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 708-937-6365
;            TELEFAX: 708-937-9556
;   INFORMATION FOR SEQ ID NO: 16:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 597 amino acids
;            TYPE: amino acid
;            TOPOLOGY: linear
;       MOLECULE TYPE: protein
;       SEQUENCE DESCRIPTION: SEQ ID NO: 16:
US-09-690-359-16

  Query Match           76.4%;  Score 534;  DB 4;  Length 597;
  Best Local Similarity   74.4%;  Pred. No. 7.8e-54;
  Matches   99;  Conservative   12;  Mismatches   22;  Indels    0;  Gaps    0;

Qy          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
              |||| |||:||||| |||||||| ||||||:|||||||||||||| ||||||| : | ||
Db        288 QNEITLTHPVTKYIMTCMSADLEVVTSTWVLVGGVLAALAAYCLSTGCVVIVGRVVLSGK 347

Qy         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
              |||:||:||||:::|||||||  |||||  ::| ||| | ||||| |::|  || | |
Db        348 PAIIPDREVLYREFDEMEECSQHLPYIEQGMMLAEQFKQKALGLLQTASRQAEVIAPAVQ 407

Qy        121 TNWQKLEAFWHKH 133
              ||||||| || ||
Db        408 TNWQKLETFWAKH 420
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Search completed: February 25, 2004, 01:52:49
Job time : 23 secs

GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: February 25, 2004, 01:48:29 ; Search time 33 Seconds
(without alignments)
851.012 Million cell updates/sec

Title: US-09-638-693-36
Perfect score: 699
Sequence: 1 QNEICLTHPITKYIMACMSA.....VIEPIVTTNWQKLEAFWHKH 133

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 809742 seqs, 211153259 residues

Total number of hits satisfying chosen parameters: 809742

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_AA:*
1: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep:*
2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep:*
3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
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11: /cgn2_6/ptodata/2/pubpaa/US09C_PUBCOMB.pep:*
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14: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep:*
15: /cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep:*
16: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
17: /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep:*
18: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	699	100.0	133	10	US-09-899-046-36	Sequence 36, Appl
2	699	100.0	133	10	US-09-878-281-36	Sequence 36, Appl
3	691	98.9	133	10	US-09-899-046-38	Sequence 38, Appl
4	691	98.9	133	10	US-09-899-046-40	Sequence 40, Appl
5	691	98.9	133	10	US-09-878-281-38	Sequence 38, Appl
6	691	98.9	133	10	US-09-878-281-40	Sequence 40, Appl
7	691	98.9	209	10	US-09-899-046-223	Sequence 223, App
8	691	98.9	209	10	US-09-878-281-223	Sequence 223, App
9	672	96.1	133	10	US-09-899-046-32	Sequence 32, Appl
10	672	96.1	133	10	US-09-899-046-34	Sequence 34, Appl
11	672	96.1	133	10	US-09-878-281-32	Sequence 32, Appl
12	672	96.1	133	10	US-09-878-281-34	Sequence 34, Appl
13	572	81.8	128	14	US-10-396-964-17	Sequence 17, Appl
14	539	77.1	3011	9	US-09-742-659-4	Sequence 4, Appli
15	539	77.1	3011	10	US-09-891-894-3	Sequence 3, Appli
16	539	77.1	3011	14	US-10-184-150-3	Sequence 3, Appli
17	539	77.1	3011	15	US-10-328-997-3	Sequence 3, Appli
18	539	77.1	3012	9	US-09-238-076-2	Sequence 2, Appli
19	539	77.1	3012	10	US-09-995-937-2	Sequence 2, Appli
20	539	77.1	3012	10	US-09-917-563-2	Sequence 2, Appli
21	534	76.4	2894	9	US-09-941-611-23	Sequence 23, Appl
22	534	76.4	2894	14	US-10-044-995-23	Sequence 23, Appl
23	534	76.4	3011	9	US-09-916-359-2	Sequence 2, Appli
24	534	76.4	3011	9	US-09-238-076-20	Sequence 20, Appl
25	534	76.4	3011	9	US-09-952-572-9	Sequence 9, Appli
26	534	76.4	3011	9	US-09-929-955-1	Sequence 1, Appli
27	534	76.4	3011	9	US-09-747-419-20	Sequence 20, Appl
28	534	76.4	3011	10	US-09-995-937-20	Sequence 20, Appl
29	534	76.4	3011	10	US-09-917-563-20	Sequence 20, Appl
30	534	76.4	3011	13	US-10-104-966-1	Sequence 1, Appli
31	534	76.4	3011	14	US-10-259-275-20	Sequence 20, Appl
32	534	76.4	3011	14	US-10-232-643-6	Sequence 6, Appli
33	492	70.4	1692	10	US-09-919-901-4	Sequence 4, Appli
34	492	70.4	1692	10	US-09-919-901-11	Sequence 11, Appl
35	492	70.4	1692	10	US-09-919-901-18	Sequence 18, Appl
36	492	70.4	1692	14	US-10-191-966-4	Sequence 4, Appli
37	492	70.4	1692	14	US-10-191-966-11	Sequence 11, Appl
38	492	70.4	1692	14	US-10-191-966-18	Sequence 18, Appl
39	492	70.4	2201	13	US-10-085-476-2	Sequence 2, Appli
40	492	70.4	2307	10	US-09-919-901-2	Sequence 2, Appli
41	492	70.4	2307	10	US-09-919-901-9	Sequence 9, Appli
42	492	70.4	2307	10	US-09-919-901-16	Sequence 16, Appl
43	492	70.4	2307	14	US-10-191-966-2	Sequence 2, Appli
44	492	70.4	2307	14	US-10-191-966-9	Sequence 9, Appli
45	492	70.4	2307	14	US-10-191-966-16	Sequence 16, Appl

ALIGNMENTS

RESULT 1
US-09-899-046-36
; Sequence 36, Application US/09899046
; Publication No. US20030008274A1
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: New sequences of hepatitis C virus
; TITLE OF INVENTION: genotypes for diagnosis, prophylaxis and therapy.
; NUMBER OF SEQUENCES: 270
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/899,046
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/362,455
; FILING DATE:
; INFORMATION FOR SEQ ID NO: 36:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 133 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-899-046-36

Query Match 100.0%; Score 699; DB 10; Length 133;
Best Local Similarity 100.0%; Pred. No. 4.4e-72;
Matches 133; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60

Qy 61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

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Db         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120

Qy        121 TNWQKLEAFWHKH 133
              |||||||||||||
Db        121 TNWQKLEAFWHKH 133


RESULT 2
US-09-878-281-36
; Sequence 36, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/878,281
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  36:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  133 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-878-281-36

  Query Match             100.0%;  Score 699;  DB 10;  Length 133;
  Best Local Similarity   100.0%;  Pred. No. 4.4e-72;
  Matches  133;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60

Qy         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120

Qy        121 TNWQKLEAFWHKH 133
              |||||||||||||
Db        121 TNWQKLEAFWHKH 133


RESULT 3
US-09-899-046-38
; Sequence 38, Application US/09899046
; Publication No. US20030008274A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/899,046
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  38:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  133 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-899-046-38

  Query Match             98.9%;  Score 691;  DB 10;  Length 133;
  Best Local Similarity   99.2%;  Pred. No. 3.6e-71;
  Matches  132;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60

Qy         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
              |||||||||||||||||||||||||||||||||| ||||||||||||||||||||||||||
Db         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKEKVLGLLQRATQQQAVIEPIVT 120

Qy        121 TNWQKLEAFWHKH 133
              |||||||||||||
Db        121 TNWQKLEAFWHKH 133


RESULT 4
US-09-899-046-40
; Sequence 40, Application US/09899046
; Publication No. US20030008274A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/899,046
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  40:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  133 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-899-046-40

  Query Match             98.9%;  Score 691;  DB 10;  Length 133;
  Best Local Similarity   99.2%;  Pred. No. 3.6e-71;
  Matches  132;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60

Qy         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
              |||||||||||||||||||||||||||||||||| ||||||||||||||||||||||||||
Db         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKEKVLGLLQRATQQQAVIEPIVT 120

Qy        121 TNWQKLEAFWHKH 133
              |||||||||||||
Db        121 TNWQKLEAFWHKH 133


RESULT 5
US-09-878-281-38
; Sequence 38, Application US/09878281
; Publication No. US20030032005A1
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;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/878,281
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  38:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  133 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-878-281-38

  Query Match             98.9%;  Score 691;  DB 10;  Length 133;
  Best Local Similarity   99.2%;  Pred. No. 3.6e-71;
  Matches  132;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60

Qy         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
              |||||||||||||||||||||||||||||||| ||||||||||||||||||||
Db         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKEKVLGLLQRATQQQAVIEPIVT 120

Qy        121 TNWQKLEAFWHKH 133
              |||||||||||||
Db        121 TNWQKLEAFWHKH 133


RESULT 6
US-09-878-281-40
; Sequence 40, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/878,281
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  40:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  133 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-878-281-40

  Query Match             98.9%;  Score 691;  DB 10;  Length 133;
  Best Local Similarity   99.2%;  Pred. No. 3.6e-71;
  Matches  132;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60

Qy         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
              |||||||||||||||||||||||||||||||| ||||||||||||||||||||
Db         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKEKVLGLLQRATQQQAVIEPIVT 120

Qy        121 TNWQKLEAFWHKH 133
              |||||||||||||
Db        121 TNWQKLEAFWHKH 133


RESULT 7
US-09-899-046-223
; Sequence 223, Application US/09899046
; Publication No. US20030008274A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/899,046
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  223:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  209 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-899-046-223

  Query Match             98.9%;  Score 691;  DB 10;  Length 209;
  Best Local Similarity   99.2%;  Pred. No. 6.5e-71;
  Matches  132;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         77 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 136

Qy         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
              |||||||||||||||||||||||||||||||| ||||||||||||||||||||
Db        137 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKEKVLGLLQRATQQQAVIEPIVT 196

Qy        121 TNWQKLEAFWHKH 133
              |||||||||||||
Db        197 TNWQKLEAFWHKH 209


RESULT 8
US-09-878-281-223
; Sequence 223, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
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;      APPLICATION NUMBER:  US/09/878,281
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  223:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  209 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-878-281-223

  Query Match             98.9%;  Score 691;  DB 10;  Length 209;
  Best Local Similarity   99.2%;  Pred. No. 6.5e-71;
  Matches  132;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         77 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 136

Qy         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
              ||||||||||||||||||||||||||||||||||| ||||||||||||||||||||||||
Db        137 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKEKVLGLLQRATQQQAVIEPIVT 196

Qy        121 TNWQKLEAFWHKH 133
              |||||||||||||
Db        197 TNWQKLEAFWHKH 209


RESULT 9
US-09-899-046-32
; Sequence 32, Application US/09899046
; Publication No. US20030008274A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/899,046
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  32:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  133 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-899-046-32

  Query Match             96.1%;  Score 672;  DB 10;  Length 133;
  Best Local Similarity   93.2%;  Pred. No. 5.4e-69;
  Matches  124;  Conservative    6;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
              |||||||||:||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 QNEICLTHPVTKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60

Qy         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
              ||:|||||||||||||||||||||||||||||||| |:||||||||||||||::
Db         61 PALVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKEKILGLLQRATQQQAVIEPVIA 120

Qy        121 TNWQKLEAFWHKH 133
              :|||||| |||||
Db        121 SNWQKLETFWHKH 133


RESULT 10
US-09-899-046-34
; Sequence 34, Application US/09899046
; Publication No. US20030008274A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/899,046
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  34:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  133 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-09-899-046-34

  Query Match             96.1%;  Score 672;  DB 10;  Length 133;
  Best Local Similarity   93.2%;  Pred. No. 5.4e-69;
  Matches  124;  Conservative    6;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
              |||||||||:||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 QNEICLTHPVTKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60

Qy         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
              ||:|||||||||||||||||||||||||||||||| |:||||||||||||||::
Db         61 PALVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKEKILGLLQRATQQQAVIEPVIA 120

Qy        121 TNWQKLEAFWHKH 133
              :|||||| |||||
Db        121 SNWQKLETFWHKH 133


RESULT 11
US-09-878-281-32
; Sequence 32, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/878,281
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  32:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  133 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
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US-09-878-281-32

Query Match 96.1%; Score 672; DB 10; Length 133;
Best Local Similarity 93.2%; Pred. No. 5.4e-69;
Matches 124; Conservative 6; Mismatches 3; Indels 0; Gaps 0;

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Qy          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
              |||||||||:|||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 QNEICLTHPVTKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60

Qy         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
              ||:|||||||||||||||||||||||||||||||| |:||||||||||||||::
Db         61 PALVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKEKILGLLQRATQQQAVIEPVIA 120

Qy        121 TNWQKLEAFWHKH 133
              :|||||| |||||
Db        121 SNWQKLETFWHKH 133
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RESULT 12
US-09-878-281-34
; Sequence 34, Application US/09878281
; Publication No. US20030032005A1
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: New sequences of hepatitis C virus
; TITLE OF INVENTION: genotypes for diagnosis, prophylaxis and therapy.
; NUMBER OF SEQUENCES: 270
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/878,281
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/362,455
; FILING DATE:
; INFORMATION FOR SEQ ID NO: 34:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 133 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-878-281-34

Query Match 96.1%; Score 672; DB 10; Length 133;
Best Local Similarity 93.2%; Pred. No. 5.4e-69;
Matches 124; Conservative 6; Mismatches 3; Indels 0; Gaps 0;

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Qy          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
              |||||||||:|||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 QNEICLTHPVTKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60

Qy         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
              ||:|||||||||||||||||||||||||||||||| |:||||||||||||||::
Db         61 PALVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKEKILGLLQRATQQQAVIEPVIA 120

Qy        121 TNWQKLEAFWHKH 133
              :|||||| |||||
Db        121 SNWQKLETFWHKH 133
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RESULT 13
US-10-396-964-17
; Sequence 17, Application US/10396964
; Publication No. US20030198946A1
; GENERAL INFORMATION:
; APPLICANT: Simmonds, Peter
; APPLICANT: Chan, Shiu-Wan
; APPLICANT: Yap, Peng L.
; TITLE OF INVENTION: Hepatitis-C Virus Testing
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Bell, Seltzer, Park & Gibson, P.A.
; STREET: 1211 East Morehead Street
; CITY: Charlotte
; STATE: No. US20030198946A1th Carolina
; COUNTRY: United States
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0. Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/396,964
; FILING DATE: 23-MARCH-2003
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/244,116B
; FILING DATE: 15-JUL-1994
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/GB92/02143
; FILING DATE: 20-NOV-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 1749-125
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 704-377-1561
; TELEFAX: 704-334-2014
; INFORMATION FOR SEQ ID NO: 17:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 128 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: yes
; FRAGMENT TYPE: internal
; ORIGINAL SOURCE:
; ORGANISM: Hepatitis-C virus
US-10-396-964-17

Query Match 81.8%; Score 572; DB 14; Length 128;
Best Local Similarity 94.9%; Pred. No. 1.5e-57;
Matches 111; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

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Qy          8 HPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGKPAIVPDK 67
              || || ||||||||||||||||||||||||||||||||||||||||||||| ||||
Db          2 HPXXKYXMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGKPAXVPDK 61

Qy         68 EVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVTTNWQ 124
              |||||||||||||||||||||||||||||| |||||||||||||||||| ||||
Db         62 EVLYQQYDEMEECSQAAPYIEQAQVIAHQFKEKVLGLLQRATQQQAVIEPIVATNWQ 118
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RESULT 14
US-09-742-659-4
; Sequence 4, Application US/09742659
; Patent No. US20010034019A1
; GENERAL INFORMATION:
; APPLICANT: Hong, Zhi
; APPLICANT: Butkiewicz, Nancy J.
; APPLICANT: Zhong, Weidong
; APPLICANT: Ingravallo, Paul
; APPLICANT: Wright-Minogue, Jacquelyn
; APPLICANT: Lau, Johnson Y.
; APPLICANT: Lemon, Stanley M.
; TITLE OF INVENTION: Chimeric HCV/GBV-B viruses
; FILE REFERENCE: ID01116
; CURRENT APPLICATION NUMBER: US/09/742,659
; CURRENT FILING DATE: 2000-12-21

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;  PRIOR APPLICATION NUMBER:  US 60/171,469
;  PRIOR FILING DATE:  1999-12-22
;  NUMBER OF SEQ ID NOS:  16
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 4
;   LENGTH: 3011
;   TYPE: PRT
;   ORGANISM: Hepatitis C virus
US-09-742-659-4

  Query Match             77.1%;  Score 539;  DB 9;  Length 3011;
  Best Local Similarity   75.9%;  Pred. No. 5.5e-52;
  Matches  101;  Conservative   10;  Mismatches   22;  Indels    0;  Gaps    0;

Qy          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
              |||: |||||||||| |||||||| |||||:|||||||||||| ||||||| | | ||
Db       1632 QNEVTLTHPITKYIMTCMSADLEVVTSTWVLVGGVLAALAAYCLSTGCVVIVGRIVLSGK 1691

Qy         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
              |||:||:||||::|||||||  |||||  ::| ||| | ||||| |::|  || | |
Db       1692 PAIIPDREVLYQEFDEMEECSQHLPYIEQGMMLAEQFKQKALGLLQTASRQAEVITPAVQ 1751

Qy        121 TNWQKLEAFWHKH 133
              ||||||| || ||
Db       1752 TNWQKLEVFWAKH 1764


RESULT 15
US-09-891-894-3
; Sequence 3, Application US/09891894
; Publication No. US20030013081A1
; GENERAL INFORMATION:
;  APPLICANT: Olson, William
;  APPLICANT:  Maddon, Paul
;  TITLE OF INVENTION: USES OF DC-SIGN AND DC-SIGNR FOR INHIBITING HEPATITIS C VIRUS INF
;  FILE REFERENCE: 2048/64896/JPW/SHS
;  CURRENT APPLICATION NUMBER: US/09/891,894
;  CURRENT FILING DATE:  2001-06-26
;  NUMBER OF SEQ ID NOS: 3
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3
;   LENGTH: 3011
;   TYPE: PRT
;   ORGANISM: hepatitis c virus
US-09-891-894-3

  Query Match             77.1%;  Score 539;  DB 10;  Length 3011;
  Best Local Similarity   75.9%;  Pred. No. 5.5e-52;
  Matches  101;  Conservative   10;  Mismatches   22;  Indels    0;  Gaps    0;

Qy          1 QNEICLTHPITKYIMACMSADLEVTTSTWVLLGGVLAALAAYCLSVGCVVIVGHIELGGK 60
              |||: |||||||||| |||||||| |||||:|||||||||||| ||||||| | | ||
Db       1632 QNEVTLTHPITKYIMTCMSADLEVVTSTWVLVGGVLAALAAYCLSTGCVVIVGRIVLSGK 1691

Qy         61 PAIVPDKEVLYQQYDEMEECSQAAPYIEQAQVIAHQFKGKVLGLLQRATQQQAVIEPIVT 120
              |||:||:||||::|||||||  |||||  ::| ||| | ||||| |::|  || | |
Db       1692 PAIIPDREVLYQEFDEMEECSQHLPYIEQGMMLAEQFKQKALGLLQTASRQAEVITPAVQ 1751

Qy        121 TNWQKLEAFWHKH 133
              ||||||| || ||
Db       1752 TNWQKLEVFWAKH 1764


Search completed: February 25, 2004, 01:53:58
Job time : 34 secs
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GenCore version 5.1.6

OM protein - nucleic search, using frame_plus_p2n model

Run on: February 27, 2004, 21:45:32 ; Search time 64 Seconds
(without alignments)
1153.257 Million cell updates/sec

Title: US-09-638-693-36
Perfect score: 699
Sequence: 1 QNEICLTHPITKYIMACMSA.....VIEPIVTTNWQKLEAFWHKH 133

Scoring table: BLOSUM62
Xgapop 10.0 , Xgapext 0.5
Ygapop 10.0 , Ygapext 0.5
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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-Q=/cgn2_1/USPTO_spool/US09638693/runat_24022004_135619_6468/app_query.fasta_1.327
-DB=Issued_Patents_NA -QFMT=fastap -SUFFIX=rni -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALIGN=15
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-NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : Issued_Patents_NA:*
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3: /cgn2_6/ptodata/2/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/2/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/2/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	572	81.8	367	1	US-08-244-116B-16	Sequence 16, Appl
2	539	77.1	9646	3	US-08-811-566-1	Sequence 1, Appli
3	539	77.1	9646	4	US-09-034-756-1	Sequence 1, Appli
4	539	77.1	12980	3	US-08-811-566-5	Sequence 5, Appli
5	539	77.1	12980	4	US-09-034-756-5	Sequence 5, Appli
6	534	76.4	943	2	US-08-483-695-43	Sequence 43, Appl
7	534	76.4	943	2	US-07-965-285-43	Sequence 43, Appl
8	534	76.4	943	2	US-08-487-231-43	Sequence 43, Appl
9	534	76.4	943	3	US-09-201-912-43	Sequence 43, Appl
10	534	76.4	1310	3	US-08-444-818-67	Sequence 67, Appl
11	534	76.4	1382	3	US-08-444-818-19	Sequence 19, Appl
12	534	76.4	1414	3	US-08-867-611-51	Sequence 51, Appl
13	534	76.4	1414	4	US-09-690-359-51	Sequence 51, Appl
14	534	76.4	1420	3	US-08-867-611-57	Sequence 57, Appl
15	534	76.4	1420	4	US-09-690-359-57	Sequence 57, Appl
16	534	76.4	1791	3	US-08-867-611-15	Sequence 15, Appl
17	534	76.4	1791	4	US-09-690-359-15	Sequence 15, Appl
18	534	76.4	1791	5	PCT-US92-06965A-20	Sequence 20, Appl
19	534	76.4	1797	3	US-08-867-611-17	Sequence 17, Appl
20	534	76.4	1797	4	US-09-690-359-17	Sequence 17, Appl
21	534	76.4	1797	5	PCT-US92-06965A-22	Sequence 22, Appl
22	534	76.4	2219	3	US-08-444-818-147	Sequence 147, App
23	534	76.4	2579	3	US-08-444-818-29	Sequence 29, Appl
24	534	76.4	3075	1	US-07-910-760-11	Sequence 11, Appl
25	534	76.4	3075	1	US-08-440-519-11	Sequence 11, Appl
26	534	76.4	3075	4	US-08-440-549-11	Sequence 11, Appl
27	534	76.4	6785	3	US-08-444-818-65	Sequence 65, Appl
28	534	76.4	7310	3	US-08-444-818-74	Sequence 74, Appl
29	534	76.4	8316	3	US-08-444-818-88	Sequence 88, Appl
30	534	76.4	8987	3	US-08-444-818-137	Sequence 137, App
31	534	76.4	9185	3	US-08-444-818-122	Sequence 122, App
c 32	534	76.4	9185	3	US-08-444-818-123	Sequence 123, App
33	534	76.4	9379	3	US-08-444-818-176	Sequence 176, App
34	534	76.4	9379	3	US-09-388-874-1	Sequence 1, Appli
35	534	76.4	9379	4	US-09-916-359-1	Sequence 1, Appli
36	534	76.4	9401	1	US-07-910-760-9	Sequence 9, Appli
37	534	76.4	9401	1	US-08-440-519-9	Sequence 9, Appli
38	534	76.4	9401	2	US-08-432-693-1	Sequence 1, Appli
39	534	76.4	9401	4	US-08-440-549-9	Sequence 9, Appli
40	534	76.4	9401	4	US-08-823-895A-25	Sequence 25, Appl
41	534	76.4	9401	5	PCT-US91-02225-9	Sequence 9, Appli
42	534	76.4	9416	3	US-08-811-566-19	Sequence 19, Appl
43	534	76.4	9416	4	US-09-034-756-19	Sequence 19, Appl
44	534	76.4	9416	4	US-08-823-895A-26	Sequence 26, Appl
45	534	76.4	9416	4	US-10-104-966-13	Sequence 13, Appl

ALIGNMENTS

RESULT 1
US-08-244-116B-16
; Sequence 16, Application US/08244116B
; Patent No. 5763159
; GENERAL INFORMATION:
; APPLICANT: Simmonds, Peter
; APPLICANT: Chan, Shiu-Wan
; APPLICANT: Yap, Peng L.
; TITLE OF INVENTION: Hepatitis-C Virus Testing
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Bell, Seltzer, Park & Gibson, P.A.
; STREET: 1211 East Morehead Street
; CITY: Charlotte
; STATE: No. 5763159th Carolina
; COUNTRY: United States
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0. Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/244,116B
; FILING DATE: 15-JUL-1994
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/GB92/02143
; FILING DATE: 20-NOV-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Sibley, Kenneth D.
; REGISTRATION NUMBER: 31,665
; REFERENCE/DOCKET NUMBER: 1749-125
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 704-377-1561
; TELEFAX: 704-334-2014

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;  INFORMATION FOR SEQ ID NO:  16:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  367 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    ORIGINAL SOURCE:
;      ORGANISM:  Hepatitis-C virus
US-08-244-116B-16

Alignment Scores:
Pred. No.:                3.31e-64      Length:          367
Score:                    572.00        Matches:         111
Percent Similarity:       94.87%        Conservative:    0
Best Local Similarity:    94.87%        Mismatches:      6
Query Match:              81.83%        Indels:          0
DB:                       1             Gaps:            0

US-09-638-693-36 (1-133) x US-08-244-116B-16 (1-367)

Qy          8 HisProIleThrLysTyrIleMetAlaCysMetSerAlaAspLeuGluValThrThrSer 27
              ||||||      ||||||   ||||||||||||||||||||||||||||||||||||||
Db          5 CACCCYRUCRCRAAAUACVUCAUGGCAUGYAUGUCAGCUGAUCUGGAAGUAACCACCAGC 64

Qy         28 ThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAlaAlaTyrCysLeuSerValGly 47
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         65 ACCUGGGUGUUGCUUGGAGGRGUCCUCGCKGCCCUAGCGGCCUACUGCUUGUCAGUCGGC 124

Qy         48 CysValValIleValGlyHisIleGluLeuGlyGlyLysProAlaIleValProAspLys 67
              ||||||||||||||||||||||||||||||||||||||||||   ||||||||||||
Db        125 UGCGUUGUGAUUGUGGGYCAUAUUGAGCUGGGRGGCAAGCCVGCAMUCGUUCCAGACAAR 184

Qy         68 GluValLeuTyrGlnGlnTyrAspGluMetGluGluCysSerGlnAlaAlaProTyrIle 87
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        185 GARGUGUUGUAUCAACAAUACGAUGAGAUGGAGGAGUGCUCGCAAGCYGCCCCAUAUAUC 244

Qy         88 GluGlnAlaGlnValIleAlaHisGlnPheLysGlyLysValLeuGlyLeuLeuGlnArg 107
              ||||||||||||||||||||||||||||||||||||   ||||||||||||||||||||
Db        245 GAACAAGCUCARGURAUAGCCCACCAGUUCAAGGAGAAAGUCCUUGGRUUGCUGCAGCGR 304

Qy        108 AlaThrGlnGlnGlnAlaValIleGluProIleValThrThrAsnTrpGln 124
              ||||||||||||||||||||||||||||||||||||   ||||||||||||
Db        305 GCCACCCAACAACARGCUGUYAUUGAGCCMAUAGUAGCUACCAACUGGCAA 355

RESULT 2
US-08-811-566-1
; Sequence 1, Application US/08811566
; Patent No. 6127116
;  GENERAL INFORMATION:
;    APPLICANT:  Rice, Charles  et al.
;    TITLE OF INVENTION:  FUNCTIONAL DNA CLONE FOR HEPATITIS C
;    TITLE OF INVENTION:  VIRUS (HCV) AND USES THEREOF
;    NUMBER OF SEQUENCES:  21
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  David A. Jackson, Esq.
;      STREET:  411 Hackensack Ave, Continental Plaza, 4th
;      STREET:  Floor
;      CITY:  Hackensack
;      STATE:  New Jersey
;      COUNTRY:  USA
;      ZIP:  07601
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/811,566
;      FILING DATE:  03-MAR-1997
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Jackson Esq., David A.
;      REGISTRATION NUMBER:  26,742
;      REFERENCE/DOCKET NUMBER:  1113-1-006
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  201-487-5800
;      TELEFAX:  201-343-1684
;  INFORMATION FOR SEQ ID NO:  1:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  9646 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-08-811-566-1

Alignment Scores:
Pred. No.:                4.97e-58      Length:          9646
Score:                    539.00        Matches:         101
Percent Similarity:       83.46%        Conservative:    10
Best Local Similarity:    75.94%        Mismatches:      22
Query Match:              77.11%        Indels:          0
DB:                       3             Gaps:            0

US-09-638-693-36 (1-133) x US-08-811-566-1 (1-9646)

Qy          1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20
              |||||||||:::   ||||||||||||||||||||||||||||   ||||||||||||
Db       5235 CAGAATGAAGTCACCCTGACGCACCCAATCACCAAATACATCATGACATGCATGTCGGCC 5294

Qy         21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40
              ||||||||||||   |||||||||||||||||:::|||||||||||||||||||||||
Db       5295 GACCTGGAGGTCGTCACGAGCACCTGGGTGCTCGTTGGCGGCGTCCTGGCTGCTCTGGCC 5354

Qy         41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60
              ||||||||||||||   ||||||||||||||||||||   |||   |||   ||||||
Db       5355 GCGTATTGCCTGTCAACAGGCTGCGTGGTCATAGTGGGCAGGATTGTCTTGTCCGGGAAG 5414

Qy         61 ProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMetGluGluCys 80
              |||||||||:::||||||:::|||||||||||||||||:::::||||||||||||||||||
Db       5415 CCGGCAATTATACCTGACAGGGAGGTTCTCTACCAGGAGTTCGATGAGATGGAAGAGTGC 5474

Qy         81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGlyLys 100
              ||||||      ||||||||||||||||      ::::::|||   |||||||||   |||
Db       5475 TCTCAGCACTTACCGTACATCGAGCAAGGGATGATGCTCGCTGAGCAGTTCAAGCAGAAG 5534

Qy        101 ValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValThr 120
              ||||||||||||||   |||::::::|||      ||||||   |||   |||
Db       5535 GCCCTCGGCCTCCTGCAGACCGCGTCCCGCCAAGCAGAGGTTATCACCCCTGCTGTCCAG 5594

Qy        121 ThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133
              ||||||||||||||||||||   ||||||   ||||||
Db       5595 ACCAACTGGCAGAAACTCGAGGTCTTCTGGGCGAAGCAC 5633

RESULT 3
US-09-034-756-1
; Sequence 1, Application US/09034756
; Patent No. 6392028
;  GENERAL INFORMATION:
;       APPLICANT: RICE, CHARLES  et al.
;       TITLE OF INVENTION: FUNCTIONAL DNA CLONE FOR HEPATITIS C
;                           VIRUS (HCV) AND USES THEREOF
;       NUMBER OF SEQUENCES: 21
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: HOWELL & HAFERKAMP, L.C.
;            STREET: 7733 FORSYTH BLVD., SUITE 1400
;            CITY: ST. LOUIS
;            STATE: MO
;            COUNTRY: USA
;            ZIP: 63105
;       COMPUTER READABLE FORM:
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;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: PatentIn Release #1.0, Version #1.30
;       CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/034,756
;             FILING DATE: 04-May-1998
;             CLASSIFICATION: <Unknown>
;       ATTORNEY/AGENT INFORMATION:
;             NAME: HOLLAND, DONALD R.
;             REGISTRATION NUMBER: 35,197
;             REFERENCE/DOCKET NUMBER: 6029-4831
;       TELECOMMUNICATION INFORMATION:
;             TELEPHONE: 314-727-5188
;             TELEFAX: 314-727-6092
;   INFORMATION FOR SEQ ID NO: 1:
;       SEQUENCE CHARACTERISTICS:
;             LENGTH: 9646 base pairs
;             TYPE: nucleic acid
;             STRANDEDNESS: double
;             TOPOLOGY: linear
;       MOLECULE TYPE: cDNA
;       HYPOTHETICAL: NO
;       ANTI-SENSE: NO
;       SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-09-034-756-1

Alignment Scores:
Pred. No.:                4.97e-58        Length:          9646
Score:                    539.00          Matches:         101
Percent Similarity:       83.46%          Conservative:    10
Best Local Similarity:    75.94%          Mismatches:      22
Query Match:              77.11%          Indels:          0
DB:                       4               Gaps:            0

US-09-638-693-36 (1-133) x US-09-034-756-1 (1-9646)

Qy          1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20
              |||||||||:::   |||||||||||||||||||||||||||||||   ||||||||||||
Db       5235 CAGAATGAAGTCACCCTGACGCACCCAATCACCAAATACATCATGACATGCATGTCGGCC 5294

Qy         21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40
              ||||||||||||   |||||||||||||||||:::|||||||||||||||||||||||
Db       5295 GACCTGGAGGTCGTCACGAGCACCTGGGTGCTCGTTGGCGGCGTCCTGGCTGCTCTGGCC 5354

Qy         41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60
              ||||||||||||||||   ||||||||||||||||||||   |||   |||   ||||||
Db       5355 GCGTATTGCCTGTCAACAGGCTGCGTGGTCATAGTGGGCAGGATTGTCTTGTCCGGGAAG 5414

Qy         61 ProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMetGluGluCys 80
              |||||||||:::|||||:::||||||||||||||:::::||||||||||||||||||
Db       5415 CCGGCAATTATACCTGACAGGGAGGTTCTCTACCAGGAGTTCGATGAGATGGAAGAGTGC 5474

Qy         81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGlyLys 100
              ||||||      ||||||||||||||||      ::::::|||   ||||||||   |||
Db       5475 TCTCAGCACTTACCGTACATCGAGCAAGGGATGATGCTCGCTGAGCAGTTCAAGCAGAAG 5534

Qy        101 ValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValThr 120
              ||||||||||||||||   |||::::::|||       ||||||   |||   |||
Db       5535 GCCCTCGGCCTCCTGCAGACCGCGTCCCGCCAAGCAGAGGTTATCACCCCTGCTGTCCAG 5594

Qy        121 ThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133
              ||||||||||||||||||||   ||||||   ||||||
Db       5595 ACCAACTGGCAGAAACTCGAGGTCTTCTGGGCGAAGCAC 5633

RESULT 4
US-08-811-566-5
; Sequence 5, Application US/08811566
; Patent No. 6127116
;  GENERAL INFORMATION:
;    APPLICANT:  Rice, Charles  et al.
;    TITLE OF INVENTION:  FUNCTIONAL DNA CLONE FOR HEPATITIS C
;    TITLE OF INVENTION:  VIRUS (HCV) AND USES THEREOF
;    NUMBER OF SEQUENCES:  21
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  David A. Jackson, Esq.
;      STREET:  411 Hackensack Ave, Continental Plaza, 4th
;      STREET:  Floor
;      CITY:  Hackensack
;      STATE:  New Jersey
;      COUNTRY:  USA
;      ZIP:  07601
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/811,566
;      FILING DATE:  03-MAR-1997
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Jackson Esq., David A.
;      REGISTRATION NUMBER:  26,742
;      REFERENCE/DOCKET NUMBER:  1113-1-006
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  201-487-5800
;      TELEFAX:  201-343-1684
;  INFORMATION FOR SEQ ID NO:  5:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  12980 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-08-811-566-5

Alignment Scores:
Pred. No.:                7.5e-58         Length:          12980
Score:                    539.00          Matches:         101
Percent Similarity:       83.46%          Conservative:    10
Best Local Similarity:    75.94%          Mismatches:      22
Query Match:              77.11%          Indels:          0
DB:                       3               Gaps:            0

US-09-638-693-36 (1-133) x US-08-811-566-5 (1-12980)

Qy          1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20
              |||||||||:::   |||||||||||||||||||||||||||||||   ||||||||||||
Db       5235 CAGAATGAAGTCACCCTGACGCACCCAATCACCAAATACATCATGACATGCATGTCGGCC 5294

Qy         21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40
              ||||||||||||   |||||||||||||||||:::|||||||||||||||||||||||
Db       5295 GACCTGGAGGTCGTCACGAGCACCTGGGTGCTCGTTGGCGGCGTCCTGGCTGCTCTGGCC 5354

Qy         41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60
              ||||||||||||||||   ||||||||||||||||||||   |||   |||   ||||||
Db       5355 GCGTATTGCCTGTCAACAGGCTGCGTGGTCATAGTGGGCAGGATTGTCTTGTCCGGGAAG 5414

Qy         61 ProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMetGluGluCys 80
              |||||||||:::|||||:::||||||||||||||:::::||||||||||||||||||
Db       5415 CCGGCAATTATACCTGACAGGGAGGTTCTCTACCAGGAGTTCGATGAGATGGAAGAGTGC 5474

Qy         81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGlyLys 100
              ||||||      ||||||||||||||||      ::::::|||   ||||||||   |||
Db       5475 TCTCAGCACTTACCGTACATCGAGCAAGGGATGATGCTCGCTGAGCAGTTCAAGCAGAAG 5534

Qy        101 ValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValThr 120
              ||||||||||||||||   |||::::::|||       ||||||   |||   |||
Db       5535 GCCCTCGGCCTCCTGCAGACCGCGTCCCGCCAAGCAGAGGTTATCACCCCTGCTGTCCAG 5594

Qy        121 ThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133
              ||||||||||||||||||||   ||||||   ||||||
Db       5595 ACCAACTGGCAGAAACTCGAGGTCTTCTGGGCGAAGCAC 5633
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```
RESULT 5
US-09-034-756-5
; Sequence 5, Application US/09034756
; Patent No. 6392028
;  GENERAL INFORMATION:
;       APPLICANT: RICE, CHARLES  et al.
;       TITLE OF INVENTION: FUNCTIONAL DNA CLONE FOR HEPATITIS C
;                           VIRUS (HCV) AND USES THEREOF
;       NUMBER OF SEQUENCES: 21
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: HOWELL & HAFERKAMP, L.C.
;            STREET: 7733 FORSYTH BLVD., SUITE 1400
;            CITY: ST. LOUIS
;            STATE: MO
;            COUNTRY: USA
;            ZIP: 63105
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Floppy disk
;            COMPUTER: IBM PC compatible
;            OPERATING SYSTEM: PC-DOS/MS-DOS
;            SOFTWARE: PatentIn Release #1.0, Version #1.30
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/09/034,756
;            FILING DATE: 04-May-1998
;            CLASSIFICATION: <Unknown>
;       ATTORNEY/AGENT INFORMATION:
;            NAME: HOLLAND, DONALD R.
;            REGISTRATION NUMBER: 35,197
;            REFERENCE/DOCKET NUMBER: 6029-4831
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 314-727-5188
;            TELEFAX: 314-727-6092
;   INFORMATION FOR SEQ ID NO: 5:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 12980 base pairs
;            TYPE: nucleic acid
;            STRANDEDNESS: double
;            TOPOLOGY: linear
;       MOLECULE TYPE: cDNA
;       HYPOTHETICAL: NO
;       ANTI-SENSE: NO
;       SEQUENCE DESCRIPTION: SEQ ID NO: 5:
US-09-034-756-5

Alignment Scores:
Pred. No.:              7.5e-58       Length:         12980
Score:                  539.00        Matches:        101
Percent Similarity:     83.46%        Conservative:   10
Best Local Similarity:  75.94%        Mismatches:     22
Query Match:            77.11%        Indels:         0
DB:                     4             Gaps:           0

US-09-638-693-36 (1-133) x US-09-034-756-5 (1-12980)

Qy          1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20
              |||||||||:::  |||||||||||||||||||||||||||||||  ||||||||||||
Db       5235 CAGAATGAAGTCACCCTGACGCACCCAATCACCAAATACATCATGACATGCATGTCGGCC 5294

Qy         21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40
              ||||||||||||  ||||||||||||||||||:::|||||||||||||||||||||||||
Db       5295 GACCTGGAGGTCGTCACGAGCACCTGGGTGCTCGTTGGCGGCGTCCTGGCTGCTCTGGCC 5354

Qy         41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60
              ||||||||||||||  ||||||||||||||||||||  |||  |||  ||||||
Db       5355 GCGTATTGCCTGTCAACAGGCTGCGTGGTCATAGTGGGCAGGATTGTCTTGTCCGGGAAG 5414

Qy         61 ProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMetGluGluCys 80
              |||||||||:::||||||:::|||||||||||||||||:::::|||||||||||||||||
Db       5415 CCGGCAATTATACCTGACAGGGAGGTTCTCTACCAGGAGTTCGATGAGATGGAAGAGTGC 5474

Qy         81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGlyLys 100
              ||||||      ||||||||||||||||      ::::::|||   |||||||||   |||
Db       5475 TCTCAGCACTTACCGTACATCGAGCAAGGGATGATGCTCGCTGAGCAGTTCAAGCAGAAG 5534

Qy        101 ValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValThr 120
              ||||||||||||||||   |||::::::|||       ||||||   |||   |||
Db       5535 GCCCTCGGCCTCCTGCAGACCGCGTCCCGCCAAGCAGAGGTTATCACCCCTGCTGTCCAG 5594

Qy        121 ThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133
              ||||||||||||||||||||    ||||||   ||||||
Db       5595 ACCAACTGGCAGAAACTCGAGGTCTTCTGGGCGAAGCAC 5633

RESULT 6
US-08-483-695-43
; Sequence 43, Application US/08483695
; Patent No. 5866139
;  GENERAL INFORMATION:
;    APPLICANT:  Brechot, Christian
;    APPLICANT:  Kremsdorf, Dina
;    APPLICANT:  Porchon, Colette
;    TITLE OF INVENTION:  Nucleotide and Peptide Sequences of a
;    TITLE OF INVENTION:  Hepatitis C Virus Isolate, Diagnostic and Therapeutic
;    TITLE OF INVENTION:  Applications
;    NUMBER OF SEQUENCES:  46
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Finnegan, Henderson, Farabow, Garrett &
;      ADDRESSEE:  Dunner
;      STREET:  1300 I Street, N.W.
;      CITY:  Washington
;      STATE:  DC
;      COUNTRY:  USA
;      ZIP:  20005-3315
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/483,695
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/07/965,285
;      FILING DATE:  18-MAR-1993
;      APPLICATION NUMBER:  FR 91 06 882
;      FILING DATE:  06-JUN-1991
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Meyers, Kenneth J.
;      REGISTRATION NUMBER:  25,146
;      REFERENCE/DOCKET NUMBER:  05286-0001-00000
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  202-408-4000
;      TELEFAX:  202-408-4400
;  INFORMATION FOR SEQ ID NO:  43:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  943 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  Other
;      DESCRIPTION:  cDNA to genomic RNA
US-08-483-695-43

Alignment Scores:
Pred. No.:              8.56e-59      Length:         943
Score:                  534.00        Matches:        99
Percent Similarity:     83.46%        Conservative:   12
Best Local Similarity:  74.44%        Mismatches:     22
Query Match:            76.39%        Indels:         0
DB:                     2             Gaps:           0

US-09-638-693-36 (1-133) x US-08-483-695-43 (1-943)

Qy          1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20
              ||||||||||||  ||||||||||||:::|||||||||||||||  ||||||||||||
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Db        534 CAGAATGAAATCACCCTGACGCACCCAGTCACCAAATACATCATGACATGCATGTCGGCC 593

Qy         21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40

Db        594 GACCTGGAGGTCGTCACGAGCACCTGGGTGCTCGTTGGCGGCGTCCTGGCTGCTTTGGCC 653

Qy         41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60

Db        654 GCGTATTGCCTGTCAACAGGCTGCGTGGTCATAGTGGGCAGGGTCGTCTTGTCCGGGAAG 713

Qy         61 ProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMetGluGluCys 80

Db        714 CCGGCAATCATACCTGACAGGGAAGTCCTCTACCGAGAGTTCGATGAGATGGAAGAGTGC 773

Qy         81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGlyLys 100

Db        774 TCTCAGCACTTACCGTACATCGAGCAAGGGATGATGCTCGCCGAGCAGTTCAAGCAGAAG 833

Qy        101 ValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValThr 120

Db        834 GCCCTCGGCCTCCTGCAGACCGCGTCCCGTCAGGCAGAGGTTATCGCCCCTGCTGTCCAG 893

Qy        121 ThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133

Db        894 ACCAACTGGCAAAAACTCGAGACCTTCTGGGCGAAGCAT 932

RESULT 7
US-07-965-285-43
; Sequence 43, Application US/07965285
; Patent No. 5879904
;  GENERAL INFORMATION:
;    APPLICANT:  Brechot, Christian
;    APPLICANT:  Kremsdorf, Dina
;    APPLICANT:  Porchon, Colette
;    TITLE OF INVENTION:  Nucleotide and Peptide Sequences of a
;    TITLE OF INVENTION:  Hepatitis C Virus Isolate, Diagnostic and Therapeutic
;    TITLE OF INVENTION:  Applications
;    NUMBER OF SEQUENCES:  46
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Finnegan, Henderson, Farabow, Garrett &
;      ADDRESSEE:  Dunner
;      STREET:  1300 I Street, N.W.
;      CITY:  Washington
;      STATE:  DC
;      COUNTRY:  USA
;      ZIP:  20005-3315
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/07/965,285
;      FILING DATE:  18-MAR-1993
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  FR 91 06 882
;      FILING DATE:  06-JUN-1991
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Meyers, Kenneth J.
;      REGISTRATION NUMBER:  25,146
;      REFERENCE/DOCKET NUMBER:  05286-0001-00000
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  202-408-4000
;      TELEFAX:  202-408-4400
;  INFORMATION FOR SEQ ID NO:  43:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  943 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  Other
;      DESCRIPTION:  cDNA to genomic RNA

US-07-965-285-43

Alignment Scores:
Pred. No.:                8.56e-59      Length:          943
Score:                    534.00        Matches:         99
Percent Similarity:       83.46%        Conservative:    12
Best Local Similarity:    74.44%        Mismatches:      22
Query Match:              76.39%        Indels:          0
DB:                       2             Gaps:            0

US-09-638-693-36 (1-133) x US-07-965-285-43 (1-943)

Qy          1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20

Db        534 CAGAATGAAATCACCCTGACGCACCCAGTCACCAAATACATCATGACATGCATGTCGGCC 593

Qy         21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40

Db        594 GACCTGGAGGTCGTCACGAGCACCTGGGTGCTCGTTGGCGGCGTCCTGGCTGCTTTGGCC 653

Qy         41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60

Db        654 GCGTATTGCCTGTCAACAGGCTGCGTGGTCATAGTGGGCAGGGTCGTCTTGTCCGGGAAG 713

Qy         61 ProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMetGluGluCys 80

Db        714 CCGGCAATCATACCTGACAGGGAAGTCCTCTACCGAGAGTTCGATGAGATGGAAGAGTGC 773

Qy         81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGlyLys 100

Db        774 TCTCAGCACTTACCGTACATCGAGCAAGGGATGATGCTCGCCGAGCAGTTCAAGCAGAAG 833

Qy        101 ValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValThr 120

Db        834 GCCCTCGGCCTCCTGCAGACCGCGTCCCGTCAGGCAGAGGTTATCGCCCCTGCTGTCCAG 893

Qy        121 ThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133

Db        894 ACCAACTGGCAAAAACTCGAGACCTTCTGGGCGAAGCAT 932

RESULT 8
US-08-487-231-43
; Sequence 43, Application US/08487231
; Patent No. 5919454
;  GENERAL INFORMATION:
;    APPLICANT:  Brechot, Christian
;    APPLICANT:  Kremsdorf, Dina
;    APPLICANT:  Porchon, Colette
;    TITLE OF INVENTION:  Nucleotide and Peptide Sequences of a
;    TITLE OF INVENTION:  Hepatitis C Virus Isolate, Diagnostic and Therapeutic
;    TITLE OF INVENTION:  Applications
;    NUMBER OF SEQUENCES:  46
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Finnegan, Henderson, Farabow, Garrett &
;      ADDRESSEE:  Dunner
;      STREET:  1300 I Street, N.W.
;      CITY:  Washington
;      STATE:  DC
;      COUNTRY:  USA
;      ZIP:  20005-3315
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/487,231
;      FILING DATE:  07-JUNE-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/965,285
;      FILING DATE:  18-MAR-1993
;      CLASSIFICATION:  435
```

```
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  FR 91 06 882
;      FILING DATE:  06-JUN-1991
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Meyers, Kenneth J.
;      REGISTRATION NUMBER:  25,146
;      REFERENCE/DOCKET NUMBER:  05286-0001-02000
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  202-408-4000
;      TELEFAX:  202-408-4400
;  INFORMATION FOR SEQ ID NO:  43:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  943 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  Other
;      DESCRIPTION:  cDNA to genomic RNA
US-08-487-231-43

Alignment Scores:
Pred. No.:              8.56e-59        Length:         943
Score:                  534.00          Matches:        99
Percent Similarity:     83.46%          Conservative:   12
Best Local Similarity:  74.44%          Mismatches:     22
Query Match:            76.39%          Indels:         0
DB:                     2               Gaps:           0

US-09-638-693-36 (1-133) x US-08-487-231-43 (1-943)

Qy          1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20
              ||||||||||||  ||||||||||||:::|||||||||||||||  ||||||||||||
Db        534 CAGAATGAAATCACCCTGACGCACCCAGTCACCAAATACATCATGACATGCATGTCGGCC 593

Qy         21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40
              ||||||||||||  ||||||||||||||||||:::|||||||||||||||||||||||||
Db        594 GACCTGGAGGTCGTCACGAGCACCTGGGTGCTCGTTGGCGGCGTCCTGGCTGCTTTGGCC 653

Qy         41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60
              ||||||||||||||  ||||||||||||||||||||  :::  |||  ||||||
Db        654 GCGTATTGCCTGTCAACAGGCTGCGTGGTCATAGTGGGCAGGGTCGTCTTGTCCGGGAAG 713

Qy         61 ProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMetGluGluCys 80
              |||||||||:::||||||:::||||||||||||:::::::::||||||||||||||||||
Db        714 CCGGCAATCATACCTGACAGGGAAGTCCTCTACCGAGAGTTCGATGAGATGGAAGAGTGC 773

Qy         81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGlyLys 100
              ||||||      ||||||||||||||||      ::::::|||  |||||||||  |||
Db        774 TCTCAGCACTTACCGTACATCGAGCAAGGGATGATGCTCGCCGAGCAGTTCAAGCAGAAG 833

Qy        101 ValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValThr 120
              ||||||||||||||  |||::::::|||      ||||||  |||  |||
Db        834 GCCCTCGGCCTCCTGCAGACCGCGTCCCGTCAGGCAGAGGTTATCGCCCCTGCTGTCCAG 893

Qy        121 ThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133
              ||||||||||||||||||  ||||||  ||||||
Db        894 ACCAACTGGCAAAAACTCGAGACCTTCTGGGCGAAGCAT 932

RESULT 9
US-09-201-912-43
; Sequence 43, Application US/09201912
; Patent No. 6210962
;  GENERAL INFORMATION:
;    APPLICANT:  Brechot, Christian
;    APPLICANT:  Kremsdorf, Dina
;    APPLICANT:  Porchon, Colette
;    TITLE OF INVENTION:  Nucleotide and Peptide Sequences of a
;    TITLE OF INVENTION:  Hepatitis C Virus Isolate, Diagnostic and Therapeutic
;    TITLE OF INVENTION:  Applications
;    NUMBER OF SEQUENCES:  46
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Finnegan, Henderson, Farabow, Garrett &
;      ADDRESSEE:  Dunner
;      STREET:  1300 I Street, N.W.
;      CITY:  Washington
;      STATE:  DC
;      COUNTRY:  USA
;      ZIP:  20005-3315
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/201,912
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/965,285
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Meyers, Kenneth J.
;      REGISTRATION NUMBER:  25,146
;      REFERENCE/DOCKET NUMBER:  05286-0001-00000
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  202-408-4000
;      TELEFAX:  202-408-4400
;  INFORMATION FOR SEQ ID NO:  43:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  943 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  Other
;      DESCRIPTION:  cDNA to genomic RNA
US-09-201-912-43

Alignment Scores:
Pred. No.:              8.56e-59        Length:         943
Score:                  534.00          Matches:        99
Percent Similarity:     83.46%          Conservative:   12
Best Local Similarity:  74.44%          Mismatches:     22
Query Match:            76.39%          Indels:         0
DB:                     3               Gaps:           0

US-09-638-693-36 (1-133) x US-09-201-912-43 (1-943)

Qy          1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20
              ||||||||||||  ||||||||||||:::|||||||||||||||  ||||||||||||
Db        534 CAGAATGAAATCACCCTGACGCACCCAGTCACCAAATACATCATGACATGCATGTCGGCC 593

Qy         21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40
              ||||||||||||  ||||||||||||||||||:::|||||||||||||||||||||||||
Db        594 GACCTGGAGGTCGTCACGAGCACCTGGGTGCTCGTTGGCGGCGTCCTGGCTGCTTTGGCC 653

Qy         41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60
              ||||||||||||||  ||||||||||||||||||||  :::  |||  ||||||
Db        654 GCGTATTGCCTGTCAACAGGCTGCGTGGTCATAGTGGGCAGGGTCGTCTTGTCCGGGAAG 713

Qy         61 ProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMetGluGluCys 80
              |||||||||:::||||||:::||||||||||||:::::::::||||||||||||||||||
Db        714 CCGGCAATCATACCTGACAGGGAAGTCCTCTACCGAGAGTTCGATGAGATGGAAGAGTGC 773

Qy         81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGlyLys 100
              ||||||      ||||||||||||||||      ::::::|||  |||||||||  |||
Db        774 TCTCAGCACTTACCGTACATCGAGCAAGGGATGATGCTCGCCGAGCAGTTCAAGCAGAAG 833

Qy        101 ValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValThr 120
              ||||||||||||||  |||::::::|||      ||||||  |||  |||
Db        834 GCCCTCGGCCTCCTGCAGACCGCGTCCCGTCAGGCAGAGGTTATCGCCCCTGCTGTCCAG 893

Qy        121 ThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133
              ||||||||||||||||||  ||||||  ||||||
Db        894 ACCAACTGGCAAAAACTCGAGACCTTCTGGGCGAAGCAT 932

RESULT 10
```

```
US-08-444-818-67
; Sequence 67, Application US/08444818
; Patent No. 6150087
;  GENERAL INFORMATION:
;    APPLICANT:  Chien, David Y.
;    APPLICANT:  Rutter, William J.
;    TITLE OF INVENTION:  NANBV Diagnostics and Vaccines
;    NUMBER OF SEQUENCES:  777
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Chiron Corporation
;      STREET:  4560 Horton Street
;      CITY:  Emeryville
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94608-2916
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/444,818
;      FILING DATE:
;      CLASSIFICATION:  424
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/403,590
;      FILING DATE:  14-MAR-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Harbin, Alisa A.
;      REGISTRATION NUMBER:  33,895
;      REFERENCE/DOCKET NUMBER:  0110.002
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (508)359-3876
;      TELEFAX:  (508)359-3885
;  INFORMATION FOR SEQ ID NO:  67:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1310 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    IMMEDIATE SOURCE:
;      CLONE:  composite of clones 36, 81, and 32
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..1146
US-08-444-818-67

Alignment Scores:
Pred. No.:              1.35e-58        Length:         1310
Score:                  534.00          Matches:        99
Percent Similarity:     83.46%          Conservative:   12
Best Local Similarity:  74.44%          Mismatches:     22
Query Match:            76.39%          Indels:         0
DB:                     3               Gaps:           0

US-09-638-693-36 (1-133) x US-08-444-818-67 (1-1310)

Qy          1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20
              ||||||||||||   ||||||||||||:::|||||||||||||||   ||||||||||||
Db        232 CAGAATGAAATCACCCTGACGCACCCAGTCACCAAATACATCATGACATGCATGTCGGCC 291

Qy         21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40
              ||||||||||||   ||||||||||||||||||:::|||||||||||||||||||||||
Db        292 GACCTGGAGGTCGTCACGAGCACCTGGGTGCTCGTTGGCGGCGTCCTGGCTGCTTTGGCC 351

Qy         41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60
              ||||||||||||||||   ||||||||||||||||||   :::   |||   ||||||
Db        352 GCGTATTGCCTGTCAACAGGCTGCGTGGTCATAGTGGGCAGGGTCGTCTTGTCCGGGAAG 411

Qy         61 ProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMetGluGluCys 80
              |||||||||:::|||||:::||||||||||||:::::::::|||||||||||||||||||
Db        412 CCGGCAATCATACCTGACAGGGAAGTCCTCTACCGAGAGTTCGATGAGATGGAAGAGTGC 471

Qy         81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGlyLys 100
              ||||||      ||||||||||||||||      ::::::|||   |||||||||   |||
Db        472 TCTCAGCACTTACCGTACATCGAGCAAGGGATGATGCTCGCCGAGCAGTTCAAGCAGAAG 531

Qy        101 ValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValThr 120
              ||||||||||||||||   |||::::::|||       ||||||   |||   |||
Db        532 GCCCTCGGCCTCCTGCAGACCGCGTCCCGTCAGGCAGAGGTTATCGCCCCTGCTGTCCAG 591

Qy        121 ThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133
              ||||||||||||||||||||   ||||||   ||||||
Db        592 ACCAACTGGCAAAAACTCGAGACCTTCTGGGCGAAGCAT 630

RESULT 11
US-08-444-818-19
; Sequence 19, Application US/08444818
; Patent No. 6150087
;  GENERAL INFORMATION:
;    APPLICANT:  Chien, David Y.
;    APPLICANT:  Rutter, William J.
;    TITLE OF INVENTION:  NANBV Diagnostics and Vaccines
;    NUMBER OF SEQUENCES:  777
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Chiron Corporation
;      STREET:  4560 Horton Street
;      CITY:  Emeryville
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94608-2916
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/444,818
;      FILING DATE:
;      CLASSIFICATION:  424
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/403,590
;      FILING DATE:  14-MAR-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Harbin, Alisa A.
;      REGISTRATION NUMBER:  33,895
;      REFERENCE/DOCKET NUMBER:  0110.002
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (508)359-3876
;      TELEFAX:  (508)359-3885
;  INFORMATION FOR SEQ ID NO:  19:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1382 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..1380
US-08-444-818-19

Alignment Scores:
Pred. No.:              1.46e-58        Length:         1382
Score:                  534.00          Matches:        99
Percent Similarity:     83.46%          Conservative:   12
Best Local Similarity:  74.44%          Mismatches:     22
Query Match:            76.39%          Indels:         0
DB:                     3               Gaps:           0

US-09-638-693-36 (1-133) x US-08-444-818-19 (1-1382)

Qy          1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20
              ||||||||||||   ||||||||||||:::|||||||||||||||   ||||||||||||
Db        484 CAGAATGAAATCACCCTGACGCACCCAGTCACCAAATACATCATGACATGCATGTCGGCC 543
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Qy          21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40
               ||||||||||||   ||||||||||||||||||:::||||||||||||||||||||||||
Db         544 GACCTGGAGGTCGTCACGAGCACCTGGGTGCTCGTTGGCGGCGTCCTGGCTGCTTTGGCC 603

Qy          41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60
               ||||||||||||||   ||||||||||||||||||||   :::   |||   ||||||
Db         604 GCGTATTGCCTGTCAACAGGCTGCGTGGTCATAGTGGGCAGGGTCGTCTTGTCCGGGAAG 663

Qy          61 ProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMetGluGluCys 80
               |||||||||:::||||||:::||||||||||:::::::::|||||||||||||||||||
Db         664 CCGGCAATCATACCTGACAGGGAAGTCCTCTACCGAGAGTTCGATGAGATGGAAGAGTGC 723

Qy          81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGlyLys 100
               ||||||      ||||||||||||||      ::::::|||   ||||||||   |||
Db         724 TCTCAGCACTTACCGTACATCGAGCAAGGGATGATGCTCGCCGAGCAGTTCAAGCAGAAG 783

Qy         101 ValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValThr 120
               ||||||||||||||||   |||::::::|||       ||||||   |||   |||
Db         784 GCCCTCGGCCTCCTGCAGACCGCGTCCCGTCAGGCAGAGGTTATCGCCCCTGCTGTCCAG 843

Qy         121 ThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133
               ||||||||||||||||||||   ||||||   ||||||
Db         844 ACCAACTGGCAAAAACTCGAGACCTTCTGGGCGAAGCAT 882

RESULT 12
US-08-867-611-51
; Sequence 51, Application US/08867611
; Patent No. 6172189
;  GENERAL INFORMATION:
;    APPLICANT:  DEVARE, SUSHIL G
;    APPLICANT:  DESAI, SURESH M
;    APPLICANT:  CASEY, JAMES M
;    APPLICANT:  DAILEY, STEPHEN H
;    APPLICANT:  DAWSON, GEORGE J
;    APPLICANT:  GUTIERREZ, ROBIN A
;    APPLICANT:  LESNIEWSKI, RICHARD R
;    APPLICANT:  STEWART, JAMES L
;    APPLICANT:  RUPPRECHT, KEVIN R
;    TITLE OF INVENTION:  HEPATITIS C ASSAY UTILIZING RECOMBINANT
;    TITLE OF INVENTION:  ANTIGENS
;    NUMBER OF SEQUENCES:  59
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  ABBOTT LABORATORIES
;      STREET:  ONE ABBOTT PARK ROAD, CHAD377/AP6D2
;      CITY:  ABBOTT PARK
;      STATE:  IL
;      COUNTRY:  USA
;      ZIP:  60064-3500
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/867,611
;      FILING DATE:  02-JUN-1997
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/646,757
;      FILING DATE:
;      APPLICATION NUMBER:  US/08/179,896
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/572,822
;      FILING DATE:  24-AUG-1990
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/614,069
;      FILING DATE:  07-NOV-1990
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/748,561
;      FILING DATE:  21-AUG-1991
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/748,565
;      FILING DATE:  21-AUG-1991
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/748,566
;      FILING DATE:  21-AUG-1991
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  POREMBSKI, PRISCILLA E
;      REGISTRATION NUMBER:  33,207
;      REFERENCE/DOCKET NUMBER:  4834.US.P6
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  708-937-6365
;      TELEFAX:  708-937-9556
;  INFORMATION FOR SEQ ID NO:  51:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1414 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
US-08-867-611-51

Alignment Scores:
Pred. No.:                1.5e-58        Length:          1414
Score:                    534.00         Matches:         99
Percent Similarity:       83.46%         Conservative:    12
Best Local Similarity:    74.44%         Mismatches:      22
Query Match:              76.39%         Indels:          0
DB:                       3              Gaps:            0

US-09-638-693-36 (1-133) x US-08-867-611-51 (1-1414)

Qy           1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20
               ||||||||||||   ||||||||||||:::||||||||||||||||   ||||||||||||
Db         487 CAGAACGAAATCACCCTGACCCACCCGGTTACCAAATACATCATGACCTGCATGTCTGCT 546

Qy          21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40
               ||||||||||||   ||||||||||||||||||:::||||||||||||||||||||||||
Db         547 GATCTAGAAGTTGTTACCTCTACCTGGGTTCTGGTTGGTGGTGTTCTGGCTGCTCTGGCT 606

Qy          41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60
               ||||||||||||||   ||||||||||||||||||||   :::   |||   ||||||
Db         607 GCTTACTGCCTGTCGACCGGTTGCGTTGTTATCGTTGGTCGTGTTGTTCTGTCTGGTAAA 666

Qy          61 ProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMetGluGluCys 80
               |||||||||:::||||||:::||||||||||:::::::::|||||||||||||||||||
Db         667 CCGGCCATTATCCCGGACCGTGAAGTTCTGTACCGTGAGTTCGACGAAATGGAAGAATGC 726

Qy          81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGlyLys 100
               ||||||      ||||||||||||||      ::::::|||   ||||||||   |||
Db         727 TCTCAGCACCTGCCGTACATCGAACAGGGTATGATGCTGGCTGAACAGTTCAAACAGAAA 786

Qy         101 ValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValThr 120
               ||||||||||||||||   |||::::::|||       ||||||   |||   |||
Db         787 GCTCTGGGTCTGCTGCAGACCGCTTCTCGTCAGGCTGAAGTTATCGCTCCGGCTGTTCAG 846

Qy         121 ThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133
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Db         847 ACCAACTGGCAGAAACTCGAGACCTTCTGGGCTAAACAC 885

RESULT 13
US-09-690-359-51
; Sequence 51, Application US/09690359
; Patent No. 6593083
;  GENERAL INFORMATION:
;       APPLICANT: DEVARE, SUSHIL G
;                  DESAI, SURESH M
;                  CASEY, JAMES M
;                  DAILEY, STEPHEN H
;                  DAWSON, GEORGE J
;                  GUTIERREZ, ROBIN A
;                  LESNIEWSKI, RICHARD R
;                  STEWART, JAMES L
;                  RUPPRECHT, KEVIN R
```

```
;       TITLE OF INVENTION: HEPATITIS C ASSAY UTILIZING RECOMBINANT
;                           ANTIGENS
;       NUMBER OF SEQUENCES: 59
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: ABBOTT LABORATORIES
;            STREET: ONE ABBOTT PARK ROAD, CHAD377/AP6D2
;            CITY: ABBOTT PARK
;            STATE: IL
;            COUNTRY: USA
;            ZIP: 60064-3500
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Floppy disk
;            COMPUTER: IBM PC compatible
;            OPERATING SYSTEM: PC-DOS/MS-DOS
;            SOFTWARE: PatentIn Release #1.0, Version #1.25
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/09/690,359
;            FILING DATE: 17-Oct-2000
;            CLASSIFICATION: <Unknown>
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: 08/867,611
;            FILING DATE: 02-JUN-1997
;            APPLICATION NUMBER: US/08/646,757
;            FILING DATE: <Unknown>
;            APPLICATION NUMBER: US/08/179,896
;            FILING DATE: <Unknown>
;            APPLICATION NUMBER: US 07/572,822
;            FILING DATE: 24-AUG-1990
;            APPLICATION NUMBER: US 07/614,069
;            FILING DATE: 07-NOV-1990
;            APPLICATION NUMBER: US 07/748,561
;            FILING DATE: 21-AUG-1991
;            APPLICATION NUMBER: US 07/748,565
;            FILING DATE: 21-AUG-1991
;            APPLICATION NUMBER: US 07/748,566
;            FILING DATE: 21-AUG-1991
;       ATTORNEY/AGENT INFORMATION:
;            NAME: POREMBSKI, PRISCILLA E
;            REGISTRATION NUMBER: 33,207
;            REFERENCE/DOCKET NUMBER: 4834.US.P6
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 708-937-6365
;            TELEFAX: 708-937-9556
;   INFORMATION FOR SEQ ID NO: 51:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 1414 base pairs
;            TYPE: nucleic acid
;            STRANDEDNESS: single
;            TOPOLOGY: linear
;       MOLECULE TYPE: DNA (genomic)
;       SEQUENCE DESCRIPTION: SEQ ID NO: 51:
US-09-690-359-51

Alignment Scores:
Pred. No.:              1.5e-58         Length:         1414
Score:                  534.00          Matches:        99
Percent Similarity:     83.46%          Conservative:   12
Best Local Similarity:  74.44%          Mismatches:     22
Query Match:            76.39%          Indels:         0
DB:                     4               Gaps:           0

US-09-638-693-36 (1-133) x US-09-690-359-51 (1-1414)

Qy          1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20
              |||||||||||  |||||||||||:::|||||||||||||   ||||||||||
Db        487 CAGAACGAAATCACCCTGACCCACCCGGTTACCAAATACATCATGACCTGCATGTCTGCT 546

Qy         21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40
              |||||||||||   ||||||||||||||||:::||||||||||||||||||||||||
Db        547 GATCTAGAAGTTGTTACCTCTACCTGGGTTCTGGTTGGTGGTGTTCTGGCTGCTCTGGCT 606

Qy         41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60
              ||||||||||||||   ||||||||||||||||||||   :::   |||   ||||||

Db        607 GCTTACTGCCTGTCGACCGGTTGCGTTGTTATCGTTGGTCGTGTTGTTCTGTCTGGTAAA 666

Qy         61 ProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMetGluGluCys 80
              |||||||||:::|||||:::|||||||||||||:::::::::|||||||||||||||||||
Db        667 CCGGCCATTATCCCGGACCGTGAAGTTCTGTACCGTGAGTTCGACGAAATGGAAGAATGC 726

Qy         81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGlyLys 100
              ||||||      ||||||||||||||||      ::::::|||   ||||||||   |||
Db        727 TCTCAGCACCTGCCGTACATCGAACAGGGTATGATGCTGGCTGAACAGTTCAAACAGAAA 786

Qy        101 ValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValThr 120
              ||||||||||||||||   |||::::::|||      ||||||   |||   |||
Db        787 GCTCTGGGTCTGCTGCAGACCGCTTCTCGTCAGGCTGAAGTTATCGCTCCGGCTGTTCAG 846

Qy        121 ThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133
              ||||||||||||||||||||   ||||||   ||||||
Db        847 ACCAACTGGCAGAAACTCGAGACCTTCTGGGCTAAACAC 885

RESULT 14
US-08-867-611-57
; Sequence 57, Application US/08867611
; Patent No. 6172189
;  GENERAL INFORMATION:
;    APPLICANT:  DEVARE, SUSHIL G
;    APPLICANT:  DESAI, SURESH M
;    APPLICANT:  CASEY, JAMES M
;    APPLICANT:  DAILEY, STEPHEN H
;    APPLICANT:  DAWSON, GEORGE J
;    APPLICANT:  GUTIERREZ, ROBIN A
;    APPLICANT:  LESNIEWSKI, RICHARD R
;    APPLICANT:  STEWART, JAMES L
;    APPLICANT:  RUPPRECHT, KEVIN R
;    TITLE OF INVENTION:  HEPATITIS C ASSAY UTILIZING RECOMBINANT
;    TITLE OF INVENTION:  ANTIGENS
;    NUMBER OF SEQUENCES:  59
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  ABBOTT LABORATORIES
;      STREET:  ONE ABBOTT PARK ROAD, CHAD377/AP6D2
;      CITY:  ABBOTT PARK
;      STATE:  IL
;      COUNTRY:  USA
;      ZIP:  60064-3500
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/867,611
;      FILING DATE:  02-JUN-1997
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/646,757
;      FILING DATE:
;      APPLICATION NUMBER:  US/08/179,896
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/572,822
;      FILING DATE:  24-AUG-1990
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/614,069
;      FILING DATE:  07-NOV-1990
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/748,561
;      FILING DATE:  21-AUG-1991
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/748,565
;      FILING DATE:  21-AUG-1991
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/748,566
;      FILING DATE:  21-AUG-1991
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  POREMBSKI, PRISCILLA E
```

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;       REGISTRATION NUMBER:  33,207
;       REFERENCE/DOCKET NUMBER:  4834.US.P6
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  708-937-6365
;       TELEFAX:  708-937-9556
;   INFORMATION FOR SEQ ID NO:  57:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  1420 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  DNA (genomic)
US-08-867-611-57

Alignment Scores:
Pred. No.:                1.51e-58        Length:          1420
Score:                    534.00          Matches:         99
Percent Similarity:       83.46%          Conservative:    12
Best Local Similarity:    74.44%          Mismatches:      22
Query Match:              76.39%          Indels:          0
DB:                       3               Gaps:            0

US-09-638-693-36 (1-133) x US-08-867-611-57 (1-1420)

Qy          1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20
              ||||||||||||   ||||||||||||:::|||||||||||||||   ||||||||||||
Db        493 CAGAACGAAATCACCCTGACCCACCCGGTTACCAAATACATCATGACCTGCATGTCTGCT 552

Qy         21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40
              ||||||||||||   ||||||||||||||||||:::|||||||||||||||||||||||
Db        553 GATCTAGAAGTTGTTACCTCTACCTGGGTTCTGGTTGGTGGTGTTCTGGCTGCTCTGGCT 612

Qy         41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60
              ||||||||||||||   ||||||||||||||||||||   :::   |||   ||||||
Db        613 GCTTACTGCCTGTCGACCGGTTGCGTTGTTATCGTTGGTCGTGTTGTTCTGTCTGGTAAA 672

Qy         61 ProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMetGluGluCys 80
              |||||||||:::||||||:::|||||||||||||:::::::::|||||||||||||||||||
Db        673 CCGGCCATTATCCCGGACCGTGAAGTTCTGTACCGTGAGTTCGACGAAATGGAAGAATGC 732

Qy         81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGlyLys 100
              ||||||     ||||||||||||||||      ::::::|||   ||||||||   |||
Db        733 TCTCAGCACCTGCCGTACATCGAACAGGGTATGATGCTGGCTGAACAGTTCAAACAGAAA 792

Qy        101 ValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValThr 120
                |||||||||||||||   |||:::::::|||          ||||||   |||   |||
Db        793 GCTCTGGGTCTGCTGCAGACCGCTTCTCGTCAGGCTGAAGTTATCGCTCCGGCTGTTCAG 852

Qy        121 ThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133
              ||||||||||||||||||||   ||||||   ||||||
Db        853 ACCAACTGGCAGAAACTCGAGACCTTCTGGGCTAAACAC 891

RESULT 15
US-09-690-359-57
; Sequence 57, Application US/09690359
; Patent No. 6593083
;   GENERAL INFORMATION:
;       APPLICANT: DEVARE, SUSHIL G
;                  DESAI, SURESH M
;                  CASEY, JAMES M
;                  DAILEY, STEPHEN H
;                  DAWSON, GEORGE J
;                  GUTIERREZ, ROBIN A
;                  LESNIEWSKI, RICHARD R
;                  STEWART, JAMES L
;                  RUPPRECHT, KEVIN R
;       TITLE OF INVENTION: HEPATITIS C ASSAY UTILIZING RECOMBINANT
;                           ANTIGENS
;       NUMBER OF SEQUENCES: 59
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: ABBOTT LABORATORIES
;            STREET: ONE ABBOTT PARK ROAD, CHAD377/AP6D2
;            CITY: ABBOTT PARK
;            STATE: IL
;            COUNTRY: USA
;            ZIP: 60064-3500
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Floppy disk
;            COMPUTER: IBM PC compatible
;            OPERATING SYSTEM: PC-DOS/MS-DOS
;            SOFTWARE: PatentIn Release #1.0, Version #1.25
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/09/690,359
;            FILING DATE: 17-Oct-2000
;            CLASSIFICATION: <Unknown>
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: 08/867,611
;            FILING DATE: 02-JUN-1997
;            APPLICATION NUMBER: US/08/646,757
;            FILING DATE: <Unknown>
;            APPLICATION NUMBER: US/08/179,896
;            FILING DATE: <Unknown>
;            APPLICATION NUMBER: US 07/572,822
;            FILING DATE: 24-AUG-1990
;            APPLICATION NUMBER: US 07/614,069
;            FILING DATE: 07-NOV-1990
;            APPLICATION NUMBER: US 07/748,561
;            FILING DATE: 21-AUG-1991
;            APPLICATION NUMBER: US 07/748,565
;            FILING DATE: 21-AUG-1991
;            APPLICATION NUMBER: US 07/748,566
;            FILING DATE: 21-AUG-1991
;       ATTORNEY/AGENT INFORMATION:
;            NAME: POREMBSKI, PRISCILLA E
;            REGISTRATION NUMBER: 33,207
;            REFERENCE/DOCKET NUMBER: 4834.US.P6
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 708-937-6365
;            TELEFAX: 708-937-9556
;   INFORMATION FOR SEQ ID NO: 57:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 1420 base pairs
;            TYPE: nucleic acid
;            STRANDEDNESS: single
;            TOPOLOGY: linear
;       MOLECULE TYPE: DNA (genomic)
;       SEQUENCE DESCRIPTION: SEQ ID NO: 57:
US-09-690-359-57

Alignment Scores:
Pred. No.:                1.51e-58        Length:          1420
Score:                    534.00          Matches:         99
Percent Similarity:       83.46%          Conservative:    12
Best Local Similarity:    74.44%          Mismatches:      22
Query Match:              76.39%          Indels:          0
DB:                       4               Gaps:            0

US-09-638-693-36 (1-133) x US-09-690-359-57 (1-1420)

Qy          1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20
              ||||||||||||   ||||||||||||:::|||||||||||||||   ||||||||||||
Db        493 CAGAACGAAATCACCCTGACCCACCCGGTTACCAAATACATCATGACCTGCATGTCTGCT 552

Qy         21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40
              ||||||||||||   ||||||||||||||||||:::|||||||||||||||||||||||
Db        553 GATCTAGAAGTTGTTACCTCTACCTGGGTTCTGGTTGGTGGTGTTCTGGCTGCTCTGGCT 612

Qy         41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60
              ||||||||||||||   ||||||||||||||||||||   :::   |||   ||||||
Db        613 GCTTACTGCCTGTCGACCGGTTGCGTTGTTATCGTTGGTCGTGTTGTTCTGTCTGGTAAA 672

Qy         61 ProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMetGluGluCys 80
              |||||||||:::||||||:::|||||||||||||:::::::::|||||||||||||||||||
Db        673 CCGGCCATTATCCCGGACCGTGAAGTTCTGTACCGTGAGTTCGACGAAATGGAAGAATGC 732

Qy         81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGlyLys 100
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                ||||||      ||||||||||||||      ::::::|||   |||||||||   |||
Db        733 TCTCAGCACCTGCCGTACATCGAACAGGGTATGATGCTGGCTGAACAGTTCAAACAGAAA 792

Qy        101 ValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValThr 120
                ||||||||||||||||   |||::::::|||       ||||||   |||   |||
Db        793 GCTCTGGGTCTGCTGCAGACCGCTTCTCGTCAGGCTGAAGTTATCGCTCCGGCTGTTCAG 852

Qy        121 ThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133
                ||||||||||||||||||||   ||||||   ||||||
Db        853 ACCAACTGGCAGAAACTCGAGACCTTCTGGGCTAAACAC 891
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GenCore version 5.1.6

OM protein - nucleic search, using frame_plus_p2n model

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(without alignments)
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Perfect score: 699
Sequence: 1 QNEICLTHPITKYIMACMSA.....VIEPIVTTNWQKLEAFWHKH 133

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Maximum Match 100%
Listing first 45 summaries

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18: /cgn2_6/ptodata/2/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
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2	699	100.0	401	10	US-09-878-281-35	Sequence 35, Appl
3	691	98.9	401	10	US-09-899-046-37	Sequence 37, Appl
4	691	98.9	401	10	US-09-899-046-39	Sequence 39, Appl
5	691	98.9	401	10	US-09-878-281-37	Sequence 37, Appl
6	691	98.9	401	10	US-09-878-281-39	Sequence 39, Appl
7	691	98.9	629	10	US-09-899-046-222	Sequence 222, App
8	691	98.9	629	10	US-09-878-281-222	Sequence 222, App
9	672	96.1	401	10	US-09-899-046-31	Sequence 31, Appl
10	672	96.1	401	10	US-09-899-046-33	Sequence 33, Appl
11	672	96.1	401	10	US-09-878-281-31	Sequence 31, Appl
12	672	96.1	401	10	US-09-878-281-33	Sequence 33, Appl
13	572	81.8	367	14	US-10-396-964-16	Sequence 16, Appl
14	539	77.1	9646	9	US-09-742-659-3	Sequence 3, Appli
15	539	77.1	9646	9	US-09-238-076-1	Sequence 1, Appli
16	539	77.1	9646	10	US-09-995-937-1	Sequence 1, Appli
17	539	77.1	9646	10	US-09-917-563-1	Sequence 1, Appli
18	539	77.1	12980	9	US-09-238-076-5	Sequence 5, Appli
19	539	77.1	12980	10	US-09-995-937-5	Sequence 5, Appli
20	539	77.1	12980	10	US-09-917-563-5	Sequence 5, Appli
21	534	76.4	9379	9	US-09-916-359-1	Sequence 1, Appli
22	534	76.4	9416	9	US-09-238-076-19	Sequence 19, Appl
23	534	76.4	9416	9	US-09-929-955-13	Sequence 13, Appl
24	534	76.4	9416	10	US-09-995-937-19	Sequence 19, Appl
25	534	76.4	9416	10	US-09-917-563-19	Sequence 19, Appl
26	534	76.4	9416	13	US-10-104-966-13	Sequence 13, Appl
27	534	76.4	10803	9	US-09-747-419-17	Sequence 17, Appl
28	534	76.4	10803	14	US-10-259-275-17	Sequence 17, Appl
29	527	75.4	9365	10	US-09-827-688-7	Sequence 7, Appli
30	493	70.5	9413	10	US-09-827-688-6	Sequence 6, Appli
31	492	70.4	13910	10	US-09-919-901-1	Sequence 1, Appli
32	492	70.4	13910	10	US-09-919-901-8	Sequence 8, Appli
33	492	70.4	13910	10	US-09-919-901-15	Sequence 15, Appl
34	492	70.4	13910	14	US-10-191-966-1	Sequence 1, Appli
35	492	70.4	13910	14	US-10-191-966-8	Sequence 8, Appli
36	492	70.4	13910	14	US-10-191-966-15	Sequence 15, Appl
37	490	70.1	6189	14	US-10-259-275-41	Sequence 41, Appl
38	490	70.1	7989	15	US-10-434-842-16	Sequence 16, Appl
39	490	70.1	7992	13	US-10-005-469-1	Sequence 1, Appli
40	490	70.1	7992	13	US-10-005-469-2	Sequence 2, Appli
41	490	70.1	7992	13	US-10-005-469-6	Sequence 6, Appli
42	490	70.1	7992	15	US-10-434-842-1	Sequence 1, Appli
43	490	70.1	7992	15	US-10-434-842-2	Sequence 2, Appli
44	490	70.1	7992	15	US-10-434-842-6	Sequence 6, Appli
45	490	70.1	7992	15	US-10-434-842-15	Sequence 15, Appl

ALIGNMENTS

RESULT 1
US-09-899-046-35
; Sequence 35, Application US/09899046
; Publication No. US20030008274A1
; GENERAL INFORMATION:
; APPLICANT:
; TITLE OF INVENTION: New sequences of hepatitis C virus
; TITLE OF INVENTION: genotypes for diagnosis, prophylaxis and therapy.
; NUMBER OF SEQUENCES: 270
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/899,046
; FILING DATE:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/362,455
; FILING DATE:
; INFORMATION FOR SEQ ID NO: 35:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 401 base pairs
; TYPE: nucleic acid

```
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  cDNA
;     HYPOTHETICAL:  NO
;     ANTI-SENSE:  NO
;     IMMEDIATE SOURCE:
;       CLONE:  BR36-20-164
;     FEATURE:
;       NAME/KEY:  CDS
;       LOCATION:  3..401
US-09-899-046-35

Alignment Scores:
Pred. No.:                7.04e-93        Length:         401
Score:                    699.00          Matches:        133
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              100.00%         Indels:         0
DB:                       10              Gaps:           0

US-09-638-693-36 (1-133) x US-09-899-046-35 (1-401)

Qy          1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          3 CAAAATGAAATCTGCTTGACACACCCCATCACAAAATACATCATGGCATGCATGTCAGCT 62

Qy         21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         63 GATCTGGAAGTAACCACCAGCACCTGGGTTTTGCTTGGAGGGGTCCTCGCGGCCCTAGCG 122

Qy         41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        123 GCCTACTGCTTGTCAGTCGGTTGTGTTGTGATTGTGGGTCATATCGAGCTGGGGGGCAAG 182

Qy         61 ProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMetGluGluCys 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        183 CCGGCAATCGTTCCAGACAAAGAGGTGTTGTATCAACAATACGATGAGATGGAAGAGTGC 242

Qy         81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGlyLys 100
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        243 TCACAAGCTGCCCCATATATCGAACAAGCTCAGGTAATAGCTCACCAGTTCAAGGGAAAA 302

Qy        101 ValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValThr 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        303 GTCCTTGGATTGCTGCAGCGAGCCACCCAACAACAAGCTGTCATTGAGCCCATAGTAACT 362

Qy        121 ThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133
              |||||||||||||||||||||||||||||||||||||||
Db        363 ACCAACTGGCAAAAGCTTGAGGCCTTTTGGCACAAGCAT 401

RESULT 2
US-09-878-281-35
; Sequence 35, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;     APPLICANT:
;     TITLE OF INVENTION:  New sequences of hepatitis C virus
;     TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;     NUMBER OF SEQUENCES:  270
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/09/878,281
;       FILING DATE:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/362,455
;       FILING DATE:
;   INFORMATION FOR SEQ ID NO:  35:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  401 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  cDNA
;     HYPOTHETICAL:  NO
;     ANTI-SENSE:  NO
;     IMMEDIATE SOURCE:
;       CLONE:  BR36-20-164
;     FEATURE:
;       NAME/KEY:  CDS
;       LOCATION:  3..401
US-09-878-281-35

Alignment Scores:
Pred. No.:                7.04e-93        Length:         401
Score:                    699.00          Matches:        133
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              100.00%         Indels:         0
DB:                       10              Gaps:           0

US-09-638-693-36 (1-133) x US-09-878-281-35 (1-401)

Qy          1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          3 CAAAATGAAATCTGCTTGACACACCCCATCACAAAATACATCATGGCATGCATGTCAGCT 62

Qy         21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         63 GATCTGGAAGTAACCACCAGCACCTGGGTTTTGCTTGGAGGGGTCCTCGCGGCCCTAGCG 122

Qy         41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        123 GCCTACTGCTTGTCAGTCGGTTGTGTTGTGATTGTGGGTCATATCGAGCTGGGGGGCAAG 182

Qy         61 ProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMetGluGluCys 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        183 CCGGCAATCGTTCCAGACAAAGAGGTGTTGTATCAACAATACGATGAGATGGAAGAGTGC 242

Qy         81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGlyLys 100
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        243 TCACAAGCTGCCCCATATATCGAACAAGCTCAGGTAATAGCTCACCAGTTCAAGGGAAAA 302

Qy        101 ValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValThr 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        303 GTCCTTGGATTGCTGCAGCGAGCCACCCAACAACAAGCTGTCATTGAGCCCATAGTAACT 362

Qy        121 ThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133
              |||||||||||||||||||||||||||||||||||||||
Db        363 ACCAACTGGCAAAAGCTTGAGGCCTTTTGGCACAAGCAT 401

RESULT 3
US-09-899-046-37
; Sequence 37, Application US/09899046
; Publication No. US20030008274A1
;  GENERAL INFORMATION:
;     APPLICANT:
;     TITLE OF INVENTION:  New sequences of hepatitis C virus
;     TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;     NUMBER OF SEQUENCES:  270
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/09/899,046
;       FILING DATE:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/362,455
;       FILING DATE:
;   INFORMATION FOR SEQ ID NO:  37:
;     SEQUENCE CHARACTERISTICS:
```

```
;       LENGTH:  401 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  cDNA
;     HYPOTHETICAL:  NO
;     ANTI-SENSE:  NO
;     IMMEDIATE SOURCE:
;       CLONE:  BR36-20-166
;     FEATURE:
;       NAME/KEY:  CDS
;       LOCATION:  3..401
US-09-899-046-37

Alignment Scores:
Pred. No.:                1.05e-91      Length:          401
Score:                    691.00        Matches:         132
Percent Similarity:       99.25%        Conservative:    0
Best Local Similarity:    99.25%        Mismatches:      1
Query Match:              98.86%        Indels:          0
DB:                       10            Gaps:            0

US-09-638-693-36 (1-133) x US-09-899-046-37 (1-401)

Qy          1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          3 CAAAATGAAATCTGCTTGACACACCCCATCACAAAATACATCATGGCATGCATGTCAGCT 62

Qy         21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         63 GATCTGGAAGTAACCACCAGCACCTGGGTTTTGCTTGGAGGGGTCCTCGCGGCCCTAGCG 122

Qy         41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        123 GCCTACTGCTTGTCAGTCGGTTGTGTTGTGATTGTGGGTCATATCGAGCTGGGGGGCAAG 182

Qy         61 ProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMetGluGluCys 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        183 CCGGCAATCGTTCCAGACAAAGAGGTGTTGTATCAACAATACGATGAGATGGAAGAGTGC 242

Qy         81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGlyLys 100
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||   |||
Db        243 TCACAAGCTGCCCCATATATCGAACAAGCTCAGGTGATAGCTCACCAGTTCAAGGAAAAA 302

Qy        101 ValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValThr 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        303 GTCCTTGGATTGCTGCAGCGAGCCACCCAACAACAAGCTGTCATTGAGCCCATAGTAACT 362

Qy        121 ThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133
              |||||||||||||||||||||||||||||||||||||||
Db        363 ACCAACTGGCAAAAGCTTGAGGCCTTTTGGCACAAGCAT 401

RESULT 4
US-09-899-046-39
; Sequence 39, Application US/09899046
; Publication No. US20030008274A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/899,046
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
;  INFORMATION FOR SEQ ID NO:  39:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  401 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    IMMEDIATE SOURCE:
;      CLONE:  BR36-20-165
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  3..401
US-09-899-046-39

Alignment Scores:
Pred. No.:                1.05e-91      Length:          401
Score:                    691.00        Matches:         132
Percent Similarity:       99.25%        Conservative:    0
Best Local Similarity:    99.25%        Mismatches:      1
Query Match:              98.86%        Indels:          0
DB:                       10            Gaps:            0

US-09-638-693-36 (1-133) x US-09-899-046-39 (1-401)

Qy          1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          3 CAAAATGAAATCTGCTTGACACACCCCATCACAAAATACATCATGGCATGCATGTCAGCT 62

Qy         21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         63 GATCTGGAAGTAACCACCAGCACCTGGGTTTTGCTTGGAGGGGTCCTCGCGGCCCTAGCG 122

Qy         41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        123 GCCTACTGCTTGTCAGTCGGTTGTGTTGTGATTGTGGGTCATATCGAGCTGGGGGGCAAG 182

Qy         61 ProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMetGluGluCys 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        183 CCGGCAATCGTTCCAGACAAAGAGGTGTTGTATCAACAATACGATGAGATGGAAGAGTGC 242

Qy         81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGlyLys 100
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||   |||
Db        243 TCACAAGCTGCCCCATATATCGAACAAGCTCAGGTAATAGCTCACCAGTTCAAGGAAAAA 302

Qy        101 ValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValThr 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        303 GTCCTTGGATTGCTGCAGCGAGCCACCCAACAACAAGCTGTCATTGAGCCCATAGTAACT 362

Qy        121 ThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133
              |||||||||||||||||||||||||||||||||||||||
Db        363 ACCAACTGGCAAAAGCTTGAGGCCTTTTGGCACAAGCAT 401

RESULT 5
US-09-878-281-37
; Sequence 37, Application US/09878281
; Publication No. US20030032005A1
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  New sequences of hepatitis C virus
;    TITLE OF INVENTION:  genotypes for diagnosis, prophylaxis and therapy.
;    NUMBER OF SEQUENCES:  270
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/878,281
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/362,455
;      FILING DATE:
```

```
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Bell, Seltzer, Park & Gibson, P.A.
;      STREET:  1211 East Morehead Street
;      CITY:  Charlotte
;      STATE:  No. US20030198946A1th Carolina
;      COUNTRY:  United States
;      ZIP:  28234
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0. Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/10/396,964
;      FILING DATE:  23-MARCH-2003
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/244,116B
;      FILING DATE:  15-JUL-1994
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/GB92/02143
;      FILING DATE:  20-NOV-1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Sibley, Kenneth D.
;      REGISTRATION NUMBER:  31,665
;      REFERENCE/DOCKET NUMBER:  1749-125
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  704-377-1561
;      TELEFAX:  704-334-2014
;  INFORMATION FOR SEQ ID NO:  16:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  367 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    ORIGINAL SOURCE:
;      ORGANISM:  Hepatitis-C virus
US-10-396-964-16

Alignment Scores:
Pred. No.:              2.69e-74      Length:          367
Score:                  572.00        Matches:         111
Percent Similarity:     94.87%        Conservative:    0
Best Local Similarity:  94.87%        Mismatches:      6
Query Match:            81.83%        Indels:          0
DB:                     14            Gaps:            0

US-09-638-693-36 (1-133) x US-10-396-964-16 (1-367)

Qy          8 HisProIleThrLysTyrIleMetAlaCysMetSerAlaAspLeuGluValThrThrSer 27
              ||||||      ||||||   ||||||||||||||||||||||||||||||||||||||
Db          5 CACCCYRUCRCRAAAUACVUCAUGGCAUGYAUGUCAGCUGAUCUGGAAGUAACCACCAGC 64

Qy         28 ThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAlaAlaTyrCysLeuSerValGly 47
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         65 ACCUGGGUGUUGCUUGGAGGRGUCCUCGCKGCCCUAGCGGCCUACUGCUUGUCAGUCGGC 124

Qy         48 CysValValIleValGlyHisIleGluLeuGlyGlyLysProAlaIleValProAspLys 67
              ||||||||||||||||||||||||||||||||||||||||||||    ||||||||||||
Db        125 UGCGUUGUGAUUGUGGGYCAUAUUGAGCUGGGRGGCAAGCCVGCAMUCGUUCCAGACAAR 184

Qy         68 GluValLeuTyrGlnGlnTyrAspGluMetGluGluCysSerGlnAlaAlaProTyrIle 87
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        185 GARGUGUUGUAUCAACAAUACGAUGAGAUGGAGGAGUGCUCGCAAGCYGCCCCAUAUAUC 244

Qy         88 GluGlnAlaGlnValIleAlaHisGlnPheLysGlyLysValLeuGlyLeuGlnArg 107
              ||||||||||||||||||||||||||||||||   ||||||||||||||||||||||
Db        245 GAACAAGCUCARGURAUAGCCCACCAGUUCAAGGAGAAAGUCCUUGGRUUGCUGCAGCGR 304

Qy        108 AlaThrGlnGlnGlnAlaValIleGluProIleValThrThrAsnTrpGln 124
              ||||||||||||||||||||||||||||||||||||||   ||||||||||||
Db        305 GCCACCCAACAACARGCUGUYAUUGAGCCMAUAGUAGCUACCAACUGGCAA 355

RESULT 14
US-09-742-659-3
; Sequence 3, Application US/09742659
; Patent No. US20010034019A1
; GENERAL INFORMATION:
;  APPLICANT:  Hong, Zhi
;  APPLICANT:  Butkiewicz, Nancy J.
;  APPLICANT:  Zhong, Weidong
;  APPLICANT:  Ingravallo, Paul
;  APPLICANT:  Wright-Minogue, Jacquelyn
;  APPLICANT:  Lau, Johnson Y.
;  APPLICANT:  Lemon, Stanley M.
;  TITLE OF INVENTION:  Chimeric HCV/GBV-B viruses
;  FILE REFERENCE:  ID01116
;  CURRENT APPLICATION NUMBER: US/09/742,659
;  CURRENT FILING DATE:  2000-12-21
;  PRIOR APPLICATION NUMBER:  US 60/171,469
;  PRIOR FILING DATE:  1999-12-22
;  NUMBER OF SEQ ID NOS:  16
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 3
;   LENGTH: 9646
;   TYPE: DNA
;   ORGANISM: Hepatitis C virus
US-09-742-659-3

Alignment Scores:
Pred. No.:              2.26e-67      Length:          9646
Score:                  539.00        Matches:         101
Percent Similarity:     83.46%        Conservative:    10
Best Local Similarity:  75.94%        Mismatches:      22
Query Match:            77.11%        Indels:          0
DB:                     9             Gaps:            0

US-09-638-693-36 (1-133) x US-09-742-659-3 (1-9646)

Qy          1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20
              |||||||||:::   ||||||||||||||||||||||||||||||   ||||||||||||
Db       5235 CAGAATGAAGTCACCCTGACGCACCCAATCACCAAATACATCATGACATGCATGTCGGCC 5294

Qy         21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40
              ||||||||||||   ||||||||||||||||:::||||||||||||||||||||||||||
Db       5295 GACCTGGAGGTCGTCACGAGCACCTGGGTGCTCGTTGGCGGCGTCCTGGCTGCTCTGGCC 5354

Qy         41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60
              ||||||||||||||   ||||||||||||||||||||   |||   |||   ||||||
Db       5355 GCGTATTGCCTGTCAACAGGCTGCGTGGTCATAGTGGGCAGGATTGTCTTGTCCGGGAAG 5414

Qy         61 ProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMetGluGluCys 80
              ||||||||||:::||||||:::||||||||||||||||:::::||||||||||||||||||
Db       5415 CCGGCAATTATACCTGACAGGGAGGTTCTCTACCAGGAGTTCGATGAGATGGAAGAGTGC 5474

Qy         81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGlyLys 100
              ||||||      ||||||||||||||      ::::::|||   |||||||||   |||
Db       5475 TCTCAGCACTTACCGTACATCGAGCAAGGGATGATGCTCGCTGAGCAGTTCAAGCAGAAG 5534

Qy        101 ValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValThr 120
              ||||||||||||||||   |||::::::|||      ||||||   |||   |||
Db       5535 GCCCTCGGCCTCCTGCAGACCGCGTCCCGCCAAGCAGAGGTTATCACCCCTGCTGTCCAG 5594

Qy        121 ThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133
              ||||||||||||||||||||   ||||||   ||||||
Db       5595 ACCAACTGGCAGAAACTCGAGGTCTTCTGGGCGAAGCAC 5633

RESULT 15
US-09-238-076-1
; Sequence 1, Application US/09238076
; Patent No. US20020102540A1
;  GENERAL INFORMATION:
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;    APPLICANT:  RICE, CHARLES  et al.
;    TITLE OF INVENTION:  FUNCTIONAL DNA CLONE FOR HEPATITIS C
;    TITLE OF INVENTION:  VIRUS (HCV) AND USES THEREOF
;    NUMBER OF SEQUENCES:  21
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  HOWELL & HAFERKAMP, L.C.
;      STREET:  7733 FORSYTH BLVD., SUITE 1400
;      CITY:  ST. LOUIS
;      STATE:  MO
;      COUNTRY:  USA
;      ZIP:  63105
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/238,076
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 09/034,756
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  HOLLAND, DONALD R.
;      REGISTRATION NUMBER:  35,197
;      REFERENCE/DOCKET NUMBER:  6029-4831
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  314-727-5188
;      TELEFAX:  314-727-6092
;  INFORMATION FOR SEQ ID NO:  1:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  9646 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-09-238-076-1

Alignment Scores:
Pred. No.:              2.26e-67        Length:         9646
Score:                  539.00          Matches:        101
Percent Similarity:     83.46%          Conservative:   10
Best Local Similarity:  75.94%          Mismatches:     22
Query Match:            77.11%          Indels:         0
DB:                     9               Gaps:           0

US-09-638-693-36 (1-133) x US-09-238-076-1 (1-9646)

Qy          1 GlnAsnGluIleCysLeuThrHisProIleThrLysTyrIleMetAlaCysMetSerAla 20
              |||||||||:::   |||||||||||||||||||||||||||||   ||||||||||||
Db       5235 CAGAATGAAGTCACCCTGACGCACCCAATCACCAAATACATCATGACATGCATGTCGGCC 5294

Qy         21 AspLeuGluValThrThrSerThrTrpValLeuLeuGlyGlyValLeuAlaAlaLeuAla 40
              ||||||||||||   |||||||||||||||||||:::|||||||||||||||||||||||
Db       5295 GACCTGGAGGTCGTCACGAGCACCTGGGTGCTCGTTGGCGGCGTCCTGGCTGCTCTGGCC 5354

Qy         41 AlaTyrCysLeuSerValGlyCysValValIleValGlyHisIleGluLeuGlyGlyLys 60
              ||||||||||||||   ||||||||||||||||||||   |||   |||   ||||||
Db       5355 GCGTATTGCCTGTCAACAGGCTGCGTGGTCATAGTGGGCAGGATTGTCTTGTCCGGGAAG 5414

Qy         61 ProAlaIleValProAspLysGluValLeuTyrGlnGlnTyrAspGluMetGluGluCys 80
              |||||||||:::|||||:::|||||||||||||||:::::|||||||||||||||||||
Db       5415 CCGGCAATTATACCTGACAGGGAGGTTCTCTACCAGGAGTTCGATGAGATGGAAGAGTGC 5474

Qy         81 SerGlnAlaAlaProTyrIleGluGlnAlaGlnValIleAlaHisGlnPheLysGlyLys 100
              ||||||      ||||||||||||||      ::::::|||   |||||||||   |||
Db       5475 TCTCAGCACTTACCGTACATCGAGCAAGGGATGATGCTCGCTGAGCAGTTCAAGCAGAAG 5534

Qy        101 ValLeuGlyLeuLeuGlnArgAlaThrGlnGlnGlnAlaValIleGluProIleValThr 120
                |||||||||||||||   |||::::::|||      ||||||   |||   |||

Db       5535 GCCCTCGGCCTCCTGCAGACCGCGTCCCGCCAAGCAGAGGTTATCACCCCTGCTGTCCAG 5594

Qy         121 ThrAsnTrpGlnLysLeuGluAlaPheTrpHisLysHis 133
               ||||||||||||||||||||||   ||||||   ||||||
Db       5595 ACCAACTGGCAGAAACTCGAGGTCTTCTGGGCGAAGCAC 5633


Search completed: February 27, 2004, 22:49:16
Job time : 260 secs
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